

APPENDIX A. Exact Search Strings and Results

Table A-1: PubMed search strategies

Table A-2. EMBASE search strategies

Table A-3: CINAHL search strategies

Table A-1. PubMed search strategies

Search terms	Preliminary search results	
#1	cryptorchidism[mh] OR cryptorchidism[tiab] OR cryptorchid[tiab] OR ((testis[mh] OR testis[tiab] OR testes[tiab] OR testicle[tiab] OR testicles[tiab] OR testicular[tiab]) AND (undescended[tiab] OR ascended[tiab] OR retractile[tiab] OR retracted[tiab] OR nonpalpable[tiab] OR non-palpable[tiab] OR palpable[tiab] OR unilateral[tiab] OR bilateral[tiab]))	12,879
#2	therapeutics[mh] OR diagnosis[mh] OR surgical procedures, operative[mh] OR laparoscopy[mh] OR diagnostic imaging[mh] OR therapy[sh] OR diagnosis[sh] OR therapeutic[tiab] OR therapeutics[tiab] OR therapy[tiab] OR therapies[tiab] OR treatment[tiab] OR treatments[tiab] OR manage[tiab] OR management[tiab] OR evaluate[tiab] OR evaluation[tiab] OR diagnose[tiab] OR diagnosis[tiab] OR diagnostic[tiab] OR surgery[tiab] OR surgeries[tiab] OR surgical[tiab] OR reoperation[tiab] OR reoperate[tiab] OR orchiopexy[tiab] OR orchiopexies[tiab] OR orchidopexy[tiab] OR orchidopexies[tiab] OR orchiectomy[tiab] OR orchiectomies[tiab] OR orchidectomy[tiab] OR orchidectomies[tiab] OR laparoscopy[tiab] OR laparoscopic[tiab] OR imaging[tiab] OR image study[tiab] OR image studies[tiab]	12,124,573
#3	#1 AND #2 AND english[la] AND humans[mh]	5,937
#4	#3 AND editorial[pt]	41
#5	#3 AND letter[pt]	186
#6	#3 AND comment[pt]	115
#7	#3 AND case reports[pt]	1,955
#8	#3 AND review[pt]	668
#9	#3 AND news[pt]	1
#10	#3 AND guideline[pt]	4
#11	#3 AND practice guideline[pt]	3
#12	#3 AND meta-analysis[pt]	13
#13	#3 AND historical article[pt]	10
#14	#3 AND jsubsetk	0
#15	#4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14	2,668*
#16	#3 NOT #15	3,269
#17	#16 AND 1980:2012[dp]	2,755

Key: [mh] medical subject heading; [sh] subheading; [tiab] keyword in title or abstract; [la] language; [pt] publication type; jsubsetk consumer health subset; [dp] publication date.

* numbers may not add up as some records are indexed in multiple publication types.

Table A-2. EMBASE search strategies

Search terms	Search results
#1 cryptorchism/ OR (cryptorchidism OR cryptorchid).mp OR ((testis/ OR (testis OR testes OR testicle OR testicles OR testicular).mp) AND ((undescended OR ascended OR retractile OR retracted OR nonpalpable OR non-palpable OR palpable OR unilateral OR bilateral).mp))	14,529
#2 exp therapy/ OR exp diagnosis/ OR exp surgery/ OR orchidopexy/ OR orchiectomy/ OR diagnostic imaging/ OR laparoscopy/ OR (therapeutic OR therapeutics OR therapy OR therapies OR treatment OR treatments OR manage OR management OR evaluate OR evaluation OR diagnose OR diagnosis OR diagnostic OR surgery OR surgeries OR surgical OR reoperation OR reoperate OR orchiopexy OR orchiopexies OR orchidopexy OR orchidopexies OR orchiectomy OR orchiectomies OR orchidectomy OR orchidectomies OR laparoscopy OR laparoscopic OR imaging OR image study OR image studies).mp	11,565,532
#3 1 AND 2	10,630
#4 limit 3 to human AND English language	6,001
#5 Limit 4 to MEDLINE records	799
#6 4 AND review.pt	665
#7 4 AND conference paper.pt	233
#8 4 AND editorial.pt	56
#9 4 AND letter.pt	177
#10 4 AND note.pt	113
#11 4 AND short survey.pt	53
#12 4 AND case report/	2,065
#13 4 AND practice guideline/	54
#14 4 AND systematic review/	29
#15 4 AND meta analysis/	22
#16 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15	3,634*
#17 4 NOT 16	2,367
16 limited 1980-2012	2,367

Key: / all fields; exp explode term; .mp map term as keyword; .pt publication type.

* numbers may not add up as some records are indexed in multiple publication types.

Table A-3: CINAHL search strategies

Search terms	Search results
#1	(MH "Cryptorchidism") OR cryptorchidism OR cryptorchid OR (((MH "Testis") OR testis OR testes OR testicle OR testicles OR testicular) AND (undescended OR ascended OR retractile OR retracted OR nonpalpable OR non-palpable OR palpable OR unilateral OR bilateral)) 203
#2	(MH "Therapeutics+") OR (MH "Diagnosis+") OR (MH "Surgery, Operative+") OR (MH "Orchiectomy") OR (MH "Laparoscopy") OR (MH "Diagnostic Imaging+") OR therapeutic OR therapeutics OR therapy OR therapies OR treatment OR treatments OR management OR evaluate OR evaluation OR diagnose OR diagnosis OR diagnostic OR surgery OR surgical OR reoperation OR reoperate OR orchiopexy OR orchiopexies OR orchidopexy OR orchidopexies OR orchiectomy OR orchiectomies OR orchidectomy OR orchidectomies OR laparoscopy OR laparoscopic OR imaging OR image study OR image studies 1,488,221
#3	#1 AND #2 163
#4	#3 AND limiters: English language; Human 51
#5	#3 AND limiters: English language; Human; Exclude MEDLINE records 4

APPENDIX B. Sample Abstract and Full Text Review Forms

Table B-1: Abstract review form 1

Table B-2: Abstract review form 2

Table B-3: Full text review form

Table B-1. Abstract review form 1

Primary Inclusion/Exclusion Criteria			
1. Original research (Exclude reviews, editorials, commentaries, letters to editor, etc.)	Yes	No	Cannot Determine
2. Study includes relevant population: • Children and Adolescents with Cryptorchidism	Yes	No	Cannot Determine
3. Study includes an intervention (diagnostic or therapeutic): • Workup evaluation (imaging, laparoscopy, hormonal stimulation therapy), • medical therapies or hormones, • surgical therapy, • specific surgical techniques (i.e., one-stage vs. two-stage, laparoscopic vs. open approach, orchiectomy vs. orchiopexy)	Yes	No	Cannot Determine
4. Study published in English	Yes	No	Cannot Determine

Retain for: _____ **BACKGROUND/DISCUSSION** _____ **REVIEW OF REFERENCES** _____ **OTHER**

Reason for Other: _____

COMMENTS:

Table B-2. Abstract review form 2

Primary Inclusion/Exclusion Criteria			
1. Does the study include an appropriate diagnostic or therapeutic intervention? [Imaging (CT, MRI, ultrasound, etc), laparoscopy, hormonal stimulation therapy, medical therapies, surgical therapy, specific surgical techniques (one-stage vs two-stage, laparoscopic vs open approach, orchiectomy vs orchiopexy)]	Yes	No	Cannot Determine
2. Does the study utilize a relevant comparison group? (Comparison of different treatments, hormonal vs. surgical therapy, treatment vs. no treatment)	Yes	No	Cannot Determine
3. Is this a study of the effectiveness of imaging in determining the presence and location of a nonpalpable testicle?	Yes	No	Cannot Determine
4. Does the study include hormonal stimulation testing in prepubescent males with bilateral, nonpalpable testes?	Yes	No	Cannot Determine

Retain for: BACKGROUND/DISCUSSION REVIEW OF REFERENCES OTHER

Reason for Other: _____

COMMENTS:

Table B-3. Full text review form

Primary Inclusion/Exclusion Criteria			
1. Original research (exclude reviews, editorials, commentaries, letters to editor, etc.)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
2. Study published in English	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
3. Is this a study of the effectiveness of imaging in determining the presence and location of a nonpalpable testicle?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
If yes: does the study include ≥ 10 participants with cryptorchidism?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
4. Is this a study of hormonal stimulation testing for treatment planning in prepubescent males with bilateral, nonpalpable testes?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
If yes: does the study include ≥ 10 participants with bilateral, nonpalpable testes?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
5. Is the study an effectiveness evaluation of included therapeutic interventions for cryptorchidism? (ex: laparoscopy, medical therapies, surgical therapy, specific surgical techniques (one-stage vs two-stage, laparoscopic vs open approach, orchiectomy vs orchiopexy)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
If yes: does the study utilize a relevant comparison group? (i.e. comparison of different treatments, hormonal vs. surgical therapy, treatment vs. no treatment)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
If relevant comparison group: does the study include ≥ 10 participants <i>per group</i> ?	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		

Retain for:

BACKGROUND/DISCUSSION

REVIEW OF REFERENCES

OTHER _____

COMMENTS:

Appendix C. List of Excluded Studies

Reasons for exclusion:

X-1: Not original research

X-2: Does not include relevant population

X-3: Does not include an intervention for cryptorchidism

X-4: Does not utilize a relevant comparison group (for intervention studies only)

X-5: Does not assess the effectiveness of imaging techniques

X-6: Is not a study of hormonal stimulation testing for treatment planning

X-7: Is not an evaluation of the effectiveness of a therapeutic intervention

X-8: Ineligible study size

X-9: Not published in English

X-10: Cannot extract usable data to answer a key question

Excluded During Abstract Review

1. Cryptorchidism: an apparent substantial increase since 1960. John Radcliffe Hospital Cryptorchidism Study Group. *Br Med J (Clin Res Ed)*. 1986 Nov 29;293(6559):1401-4. X-3.
2. International Symposium on Pediatric and Surgical Andrology: Cryptorchidism. March 26-27, 1987, Basle, Switzerland. On the occasion of the 125th anniversary of the Children's Hospital Basle. *Eur J Pediatr*. 1987;146 Suppl 2:S1-68. X-1.
3. Clinical diagnosis of cryptorchidism. John Radcliffe Hospital Cryptorchidism Study Group. *Arch Dis Child*. 1988 Jun;63(6):587-91. X-3.
4. Cryptorchidism: a prospective study of 7500 consecutive male births, 1984-8. John Radcliffe Hospital Cryptorchidism Study Group. *Arch Dis Child*. 1992 Jul;67(7):892-9. X-3, X-4, X-5, X-6.
5. Cryptorchidism and male pseudo-hermaphroditism. *Eur J Pediatr*. 1993;152 Suppl 2:S1-92. X-1.
6. Aetiology of testicular cancer: association with congenital abnormalities, age at puberty, infertility, and exercise. United Kingdom Testicular Cancer Study Group. *BMJ*. 1994 May 28;308(6941):1393-9. X-2, X-3.
7. Social, behavioural and medical factors in the aetiology of testicular cancer: results from the UK study. UK Testicular Cancer Study Group. *Br J Cancer*. 1994 Sep;70(3):513-20. X-2, X-3.
8. Efficacy and safety of highly purified urinary follicle-stimulating hormone with human chorionic gonadotropin for treating men with isolated hypogonadotropic hypogonadism. *Fertility and Sterility*. 1998 Aug;70 (2):256-262. X-2, X-3.
9. Testicular self-examination. *Postgraduate Medicine*. 1999;105 (4):241. X-1, X-2, X-3.
10. Testis-sparing surgery for benign testicular tumors in children. *J Urol*. 2001 Jun;165(6 Pt 2):2280-3. X-2, X-3.
11. Aass N, Fossa SD, Ous S, et al. Is routine primary retroperitoneal lymph node dissection still justified in patients with low stage non-seminomatous testicular cancer? *Br J Urol*. 1990 Apr;65(4):385-90. X-2, X-3.
12. Aass N, Grunfeld B, Kaalhus O, et al. Pre- and post-treatment sexual life in testicular cancer patients: a descriptive investigation. *Br J Cancer*. 1993 May;67(5):1113-7. X-2, X-3.
13. Abantanga FA. Groin and scrotal swellings in children aged 5 years and below: a review of 535 cases. *Pediatr Surg Int*. 2003 Aug;19(6):446-50. X-4, X-5, X-6.
14. Abantanga FA and Amaning EP. Paediatric elective surgical conditions as seen at a referral hospital in Kumasi, Ghana. *ANZ J Surg*. 2002 Dec;72(12):890-2. X-2, X-3.
15. Abdel-Maguid AF and Othman I. Microsurgical and nonmagnified subinguinal varicocelectomy for infertile men: A comparative study. *Fertility and Sterility*. 2010 December;94 (7):2600-2603. X-2, X-3.
16. Abdelrahim F, Mostafa A, Hamdy A, et al. Testicular morphology and function in varicocele patients: pre-operative and post-operative histopathology. *Br J Urol*. 1993 Nov;72(5 Pt 1):643-7. X-2, X-3.
17. Abdullah NA, Pearce MS, Parker L, et al. Birth prevalence of cryptorchidism and hypospadias in northern England, 1993-2000. *Arch Dis Child*. 2007 Jul;92(7):576-9. X-4, X-5, X-6.
18. Abdur-Rahman LO, Kolawole IK, Adeniran JO, et al. Pediatric day case surgery: experience from a tertiary health institution in Nigeria. *Ann Afr Med*. 2009 Jul-Sep;8(3):163-7. X-3, X-4, X-5, X-6.
19. Abe T, Aoyama K, Gotoh T, et al. Cranial attachment of the gubernaculum associated with undescended testes. *J Pediatr Surg*. 1996 May;31(5):652-5. X-3.
20. AbouZeid AA, Mousa MH, Soliman HA, et al. Intra-abdominal testis: histological alterations and significance of biopsy. *J Urol*. 2011 Jan;185(1):269-74. X-3, X-4, X-5, X-6.
21. Abrahams HM, Kallakury BV, Sheehan CE, et al. A comparison of palpable and impalpable cryptorchid testes using CD-99 immunohistochemistry. *BJU Int*. 2004 Jan;93(1):130-4. X-4, X-5, X-6.
22. Abratt RP, Reddi VB and Sarembock LA. Testicular cancer and cryptorchidism. *Br J Urol*. 1992 Dec;70(6):656-9. X-3.
23. AbuJbara MA, Hamamy HA, Jarrah NS, et al. Clinical and inheritance profiles of Kallmann syndrome in Jordan. *Reproductive Health*. 2004 24 Oct;1(5). X-2, X-3.
24. Abyholm T. Azoospermia and oligozoospermia etiology and clinical findings. *Arch Androl*. 1983 Mar;10(1):57-65. X-2, X-3.
25. Acerini CL, Miles HL, Dunger DB, et al. The descriptive epidemiology of congenital and acquired cryptorchidism in a UK infant cohort. *Arch Dis Child*. 2009 Nov;94(11):868-72. X-3.
26. Achiron R, Pinhas-Hamiel O, Zalel Y, et al. Development of fetal male gender: Prenatal sonographic measurement of the scrotum and evaluation of testicular descent. *Ultrasound in Obstetrics and Gynecology*. 1998;11 (4):242-245. X-2, X-3.
27. Acquafredda A, Vassal J and Job JC. Rudimentary testes syndrome revisited. *Pediatrics*. 1987;80 (2):209-214. X-3, X-4, X-5, X-6.
28. Acs N, Banhidly F, Puho EH, et al. No association between vulvovaginitis-bacterial vaginosis, related drug treatments of pregnant women, and congenital abnormalities in their offspring - A population-based case-control study. *Central European Journal of Medicine*. 2008 September;3 (3):332-340. X-3.
29. Acs N, Banhidly F, Puho EH, et al. Senna treatment in pregnant women and congenital abnormalities in their offspring-A population-based case-control study. *Reproductive Toxicology*. 2009 July;28 (1):100-104. X-2, X-3.

30. Adachi M, Asakura Y, Tachibana K, et al. Abnormal steroidogenesis in three patients with Antley-Bixler syndrome: Apparent decreased activity of 17 α -hydroxylase, 17,20-lyase and 21-hydroxylase. *Pediatrics International*. 2004 Oct;46 (5):583-589. X-2, X-3.
31. Adaletli I, Kurugoglu S, Kantarci F, et al. Testicular volume before and after hydrocelectomy in children. *J Ultrasound Med*. 2006 Sep;25(9):1131-6; quiz 1137-8. X-2, X-3.
32. Adam AS and Allaway AJ. The difficult orchidopexy: the value of the abdominal pre-peritoneal approach. *BJU Int*. 1999 Feb;83(3):290-3. X-4, X-5, X-6.
33. Adamsen S and Borjesson B. Factors affecting the outcome of orchiopexy for undescended testis. *Acta Chir Scand*. 1988 Sep;154(9):529-33. X-4, X-5, X-6.
34. Adan L, Couto-Silva AC, Trivin C, et al. Congenital gonadotropin deficiency in boys: management during childhood. *J Pediatr Endocrinol Metab*. 2004 Feb;17(2):149-55. X-3.
35. Adan L, Lechevalier P, Couto-Silva AC, et al. Plasma inhibin B and antimullerian hormone concentrations in boys: Discriminating between congenital hypogonadotropic hypogonadism and constitutional pubertal delay. *Case Reports and Clinical Practice Review*. 2010;16 (11):CR511-CR517. X-2, X-3.
36. Adeoti ML, Fadiora SO, Oguntola AS, et al. Cryptorchidism in a local population in Nigeria. *West African Journal of Medicine*. 2004 Jan;23 (1):62-64. X-2, X-3.
37. Adesunkanmi AR, Adejuyigbe O and Agbakwuru EA. Prognostic factors in childhood inguinal hernia at Wesley Guild Hospital, Ilesa, Nigeria. *East Afr Med J*. 1999 Mar;76(3):144-7. X-3.
38. Adham MN, Teimourian B and Mosca P. Buried penis release in adults with suction lipectomy and abdominoplasty. *Plast Reconstr Surg*. 2000 Sep;106(4):840-4. X-2, X-3.
39. Aeberhard P, Klaiber C, Meyenberg A, et al. Prospective audit of laparoscopic totally extraperitoneal inguinal hernia repair: A multicenter study of the Swiss Association for Laparoscopic and Thoracoscopic Surgery (SALTC). *Surgical Endoscopy*. 1999 Nov;13 (11):1115-1120. X-2, X-3.
40. Afsar H, Baydar I and Sirmatel F. Epididymo-orchitis due to brucellosis. *Br J Urol*. 1993 Jul;72(1):104-5. X-2, X-3.
41. Agarwal BB and Manish K. Endoscopic varicocelectomy by extraperitoneal route: a novel technique. *Int J Surg*. 2009 Aug;7(4):377-81. X-2, X-3.
42. Agarwal PK, Diaz M and Elder JS. Retractable testis--is it really a normal variant? *J Urol*. 2006 Apr;175(4):1496-9. X-3, X-4, X-5, X-6.
43. Agarwal S. Vascular morphology in testes of infertile males with varicocele. *Indian J Med Res*. 1991 Jun;94:228-31. X-2, X-3.
44. Agarwal V, Li JKH and Bard R. Lymphocytic orchitis: A case report. *Human Pathology*. 1990;21 (10):1080-1082. X-2, X-3.
45. Agostini S, Magrini SM, Simoncini R, et al. Association between testicular cancer and spinal bifida occulta. *Acta Oncologica*. 1991;30 (5):579-581. X-2, X-3.
46. Agrawal A, Joshi M, Mishra P, et al. Laparoscopic Stephen-Fowler stage procedure: appropriate management for high intra-abdominal testes. *J Laparoendosc Adv Surg Tech A*. 2010 Mar;20(2):183-5. X-4, X-5, X-6.
47. Agrawal S, Shaw A and Soon Y. Single-port laparoscopic totally extraperitoneal inguinal hernia repair with the TriPort system: initial experience. *Surg Endosc*. 2010 Apr;24(4):952-6. X-2, X-3.
48. Aguilera RG, Lopez JP, Aldosa RR, et al. Intraabdominal testicular prosthesis, a new technique. Summary of 30 implants. *Int Urol Nephrol*. 1990;22(4):367-71. X-2, X-3.
49. Ahmed E, Young RH and Scully RE. Adult granulosa cell tumor of the ovary with foci of hepatic cell differentiation: a report of four cases and comparison with two cases of granulosa cell tumor with Leydig cells. *Am J Surg Pathol*. 1999 Sep;23(9):1089-93. X-2, X-3.
50. Ahmed SF, Cheng A, Dovey L, et al. Phenotypic features, androgen receptor binding, and mutational analysis in 278 clinical cases reported as androgen insensitivity syndrome. *J Clin Endocrinol Metab*. 2000 Feb;85(2):658-65. X-2, X-3.
51. Ahmed SF, Keir L, McNeilly J, et al. The concordance between serum anti-Mullerian hormone and testosterone concentrations depends on duration of hCG stimulation in boys undergoing investigation of gonadal function. *Clin Endocrinol (Oxf)*. 2010 Jun;72(6):814-9. X-3, X-4, X-5, X-6.
52. Aizenstein RI, DiDomenico D, Wilbur AC, et al. Testicular microlithiasis: association with male infertility. *J Clin Ultrasound*. 1998 May;26(4):195-8. X-2, X-3.
53. Akbay E, Cayan S, Doruk E, et al. The prevalence of varicocele and varicocele-related testicular atrophy in Turkish children and adolescents. *BJU Int*. 2000 Sep;86(4):490-3. X-2, X-3.
54. Akbulut G, Serteser M, Yucel A, et al. Can laparoscopic hernia repair alter function and volume of testis? Randomized clinical trial. *Surg Laparosc Endosc Percutan Tech*. 2003 Dec;13(6):377-81. X-2, X-3.
55. Akdogan B, Divrik RT, Tombul T, et al. Bilateral testicular germ cell tumors in Turkey: increase in incidence in last decade and evaluation of risk factors in 30 patients. *J Urol*. 2007 Jul;178(1):129-33; discussion 133. X-2, X-3.
56. Akinci E, Bodur H, Cevik MA, et al. A complication of brucellosis: epididymo-orchitis. *Int J Infect Dis*. 2006 Mar;10(2):171-7. X-2, X-3.
57. Akre O, Lipworth L, Cnattingius S, et al. Risk factor patterns for cryptorchidism and hypospadias. *Epidemiology*. 1999 Jul;10(4):364-9. X-3.

58. Aksglaede L, Sorensen K, Boas M, et al. Changes in anti-Mullerian hormone (AMH) throughout the life span: a population-based study of 1027 healthy males from birth (cord blood) to the age of 69 years. *J Clin Endocrinol Metab.* 2010 Dec;95(12):5357-64. X-2, X-3.
59. al-Abbadi K and Smadi SA. Genital abnormalities and groin hernias in elementary-school children in Aqaba: an epidemiological study. *East Mediterr Health J.* 2000 Mar-May;6(2-3):293-8. X-3.
60. Al-Adl AM. Intra-testicular hemodynamics and seminal parameters in men with oligospermia: Preoperative predictors of improvement after Varicocelelectomy. *Current Urology.* 2010 December;4 (4):182-187. X-2, X-3.
61. Al-Agha AE, Thomsett MJ and Batch JA. The child of uncertain sex: 17 years of experience. *J Paediatr Child Health.* 2001 Aug;37(4):348-51. X-2, X-3.
62. Alam S and Radhakrishnan J. Laparoscopy for nonpalpable testes. *J Pediatr Surg.* 2003 Oct;38(10):1534-6. X-4, X-5, X-6.
63. Albayrak S, Can C and Sarica K. Extended vein ligation: a new aspect of the surgical treatment of varicocele. *Urol Int.* 1993;51(4):220-4. X-2, X-3.
64. Albers P, Goll A, Bierhoff E, et al. Clinical course and histopathologic risk factor assessment in patients with bilateral testicular germ cell tumors. *Urology.* 1999 Oct;54 (4):714-718. X-2, X-3.
65. Albores-Saavedra J, Huffman H, Alvarado-Cabrero I, et al. Anaplastic variant of spermatocytic seminoma. *Human Pathology.* 1996;27 (7):650-655. X-2, X-3.
66. Alderdice JM and Merrett JD. Factors influencing the survival of patients with testicular teratoma. *J Clin Pathol.* 1985 Jul;38(7):791-6. X-2, X-3.
67. Al-Fifi S, Al-Binali A, Al-Shahrani M, et al. Congenital anomalies and other perinatal outcomes in ICSI vs. naturally conceived pregnancies: A comparative study. *Journal of Assisted Reproduction and Genetics.* 2009 July;26 (7):377-381. X-2, X-3.
68. Alicelebic S, Kapic D and Mornjakovic Z. Urinary system birth defects in surgically treated infants in Sarajevo region of Bosnia and Herzegovina. *Bosn J Basic Med Sci.* 2008 May;8(2):126-30. X-2, X-3.
69. Al-Marzooq RH, Al-Rayes AAN and Altawash FM. Paediatric Testicular Torsion - Clinical Evaluation and Role of Doppler Ultrasound. *Bahrain Medical Bulletin.* 2003 Dec;25 (4):153-155. X-2, X-3.
70. Al-Saied G. Balloon inflation-created subdartos pouch during orchiopexy: a new simplified technique. *Pediatr Surg Int.* 2008 Oct;24(10):1187-90. X-4, X-5, X-6.
71. Al-Salem AH. Intra-uterine testicular torsion: early diagnosis and treatment. *BJU Int.* 1999 Jun;83(9):1023-5. X-2, X-3.
72. Al-Salem AH. Intrauterine testicular torsion: a surgical emergency. *J Pediatr Surg.* 2007 Nov;42(11):1887-91. X-2, X-3.
73. Altarac S. Management of 53 cases of testicular trauma. *Eur Urol.* 1994;25(2):119-23. X-2, X-3.
74. Altay B, Hekimgil M, Cikili N, et al. Histopathological mapping of open testicular biopsies in patients with unobstructive azoospermia. *BJU Int.* 2001 Jun;87(9):834-7. X-2, X-3.
75. Alukal JP and Lipshultz LI. Why treat the male in the Era of assisted Reproduction? *Seminars in Reproductive Medicine.* 2009 March;27 (2):109-114. X-1, X-2, X-3.
76. Alvarez-Nava F, Gonzalez S, Soto M, et al. Complete androgen insensitivity syndrome: clinical and anatomopathological findings in 23 patients. *Genet Couns.* 1997;8(1):7-12. X-2, X-3.
77. Alvarez-Nava F, Gonzalez S, Soto S, et al. Mixed gonadal dysgenesis: a syndrome of broad clinical, cytogenetic and histopathologic spectrum. *Genet Couns.* 1999;10(3):233-43. X-2, X-3.
78. Alvarez-Nava F, Soto M, Temponi A, et al. Female pseudohermaphroditism with phallic urethra in the offspring of a mother with an adrenal tumor. *J Pediatr Endocrinol Metab.* 2004 Nov;17(11):1571-4. X-1, X-2, X-3.
79. Al-Zahem A and Shun A. Routine contralateral orchiopexy for children with a vanished testis. *Eur J Pediatr Surg.* 2006 Oct;16(5):334-6. X-2.
80. Amat P, Paniagua R and Montero J. Seminiferous tubule degeneration in human cryptorchid testes. *J Androl.* 1985 Jan-Feb;6(1):1-9. X-2, X-3.
81. Amati S, Petrini E, Ceresi E, et al. Particular ultrastructural aspects of cryptorchid testis in adult and advanced age. *Boll Soc Ital Biol Sper.* 1984 Apr 30;60(4):805-10. X-2, X-3.
82. Ameh EA. Morbidity and mortality of inguinal hernia in the newborn. *Niger Postgrad Med J.* 2002 Dec;9(4):233-4. X-2, X-3.
83. Amendola BE, Hutchinson R, Grossman HB, et al. Isolated testicular leukemic relapse. Response to radiation therapy. *Urology.* 1987 Sep;30(3):240-3. X-2, X-3.
84. Amer M, Ateyah A, Hany R, et al. Prospective comparative study between microsurgical and conventional testicular sperm extraction in non-obstructive azoospermia: follow-up by serial ultrasound examinations. *Hum Reprod.* 2000 Mar;15(3):653-6. X-2, X-3.
85. Amer M, Haggag SE, Moustafa T, et al. Testicular sperm extraction: impact of testicular histology on outcome, number of biopsies to be performed and optimal time for repetition. *Hum Reprod.* 1999 Dec;14(12):3030-4. X-2, X-3.
86. Amiel GE, Sukhotnik I, Kawar B, et al. Use of N-butyl-2-cyanoacrylate in elective surgical incisions--longterm outcomes. *J Am Coll Surg.* 1999 Jul;189(1):21-5. X-3.

87. Andersen HR, Schmidt IM, Grandjean P, et al. Impaired reproductive development in sons of women occupationally exposed to pesticides during pregnancy. *Environ Health Perspect.* 2008 Apr;116(4):566-72. X-2, X-3.
88. Andersen L and Wille-Jorgensen PA. Torsion of the testis. A 5-year material. *Scand J Urol Nephrol.* 1990;24(2):91-3. X-2, X-3.
89. Anderson JB, Cooper MJ, Thomas WE, et al. Impaired spermatogenesis in testes at risk of torsion. *Br J Surg.* 1986 Oct;73(10):847-9. X-2, X-3.
90. Anderson JB and Williamson RC. The fate of the human testes following unilateral torsion of the spermatic cord. *Br J Urol.* 1986 Dec;58(6):698-704. X-2, X-3.
91. Anderson MJ, Dunn JK, Lipshultz LI, et al. Semen quality and endocrine parameters after acute testicular torsion. *J Urol.* 1992 Jun;147(6):1545-50. X-2, X-3.
92. Andersson AM, Jorgensen N, Frydelund-Larsen L, et al. Impaired Leydig cell function in infertile men: a study of 357 idiopathic infertile men and 318 proven fertile controls. *J Clin Endocrinol Metab.* 2004 Jul;89(7):3161-7. X-2, X-3.
93. Andersson AM, Petersen JH, Jorgensen N, et al. Serum inhibin B and follicle-stimulating hormone levels as tools in the evaluation of infertile men: significance of adequate reference values from proven fertile men. *J Clin Endocrinol Metab.* 2004 Jun;89(6):2873-9. X-2, X-3.
94. Andrade-Rocha FT. Ureaplasma urealyticum and Mycoplasma hominis in men attending for routine semen analysis. Prevalence, incidence by age and clinical settings, influence on sperm characteristics, relationship with the leukocyte count and clinical value. *Urol Int.* 2003;71(4):377-81. X-2, X-3.
95. Anger JT and Goldstein M. Intravasal "toothpaste" in men with obstructive azoospermia is derived from vasal epithelium, not sperm. *J Urol.* 2004 Aug;172(2):634-6. X-2, X-3.
96. Angulo JC, Gonzalez J, Rodriguez N, et al. Clinicopathological study of regressed testicular tumors (apparent extragonadal germ cell neoplasms). *J Urol.* 2009 Nov;182(5):2303-10. X-2, X-3.
97. Angwafo FF, 3rd, Takongmo S, Mbakop A, et al. Testes tumors in a Sub-Saharan African city (Yaounde). Incident cases and histopathology. *Eur Urol.* 1996;30(3):345-8. X-2, X-3.
98. Antao B and Mackinnon E. Simple placement of prosthetic testes in children. *Pediatric Surgery International.* 2006 May;22 (5):422-424. X-3, X-4, X-5, X-6.
99. Antinori S, Versaci C, Dani G, et al. Fertilization with human testicular spermatids: four successful pregnancies. *Hum Reprod.* 1997 Feb;12(2):286-91. X-2, X-3.
100. Aoki K, Hirayama A, Tanaka N, et al. A higher level of prostaglandin E2 in the urinary bladder in young boys and boys with lower urinary tract obstruction. *Biomedical Research.* 2009 December;30 (6):343-347. X-2, X-3.
101. Aparicio-Rodriguez JM, Cuellar-Lopez F, Hurtado-Hernandez ML, et al. Disorders of sexual development in genetic pediatrics: Three different ambiguous genitalia cases report from hospital para el Nino Poblano, Mexico. *International Journal of Genetics and Molecular Biology.* 2010 December;2 (10):207-216. X-2, X-3.
102. Aprikian AG, Herr HW, Bajorin DF, et al. Resection of postchemotherapy residual masses and limited retroperitoneal lymphadenectomy in patients with metastatic testicular nonseminomatous germ cell tumors. *Cancer.* 1994 Aug 15;74(4):1329-34. X-2, X-3.
103. Aragona F, Ragazzi R, Pozzan GB, et al. Correlation of testicular volume, histology and LHRH test in adolescents with idiopathic varicocele. *Eur Urol.* 1994;26(1):61-6. X-2, X-3.
104. Aragona F, Talenti E, Santacatterina U, et al. Unusual, benign asymptomatic scrotal masses in children: Case reports and review of the literature. *International Urology and Nephrology.* 1994;26 (5):563-570. X-2, X-3.
105. Arai A, Mitsuhashi S, Saito Y, et al. Nematine (actin) myopathy with myofibrillar dysgenesis and abnormal ossification. *Neuromuscul Disord.* 2009 Jul;19(7):485-8. X-1, X-2, X-3.
106. Arai Y, Ishitoya S, Okubo K, et al. Nerve-sparing retroperitoneal lymph node dissection for metastatic testicular cancer. *Int J Urol.* 1997 Sep;4(5):487-92. X-2, X-3.
107. Arcari AJ, Bergada I, Rey RA, et al. Predictive value of anatomical findings and karyotype analysis in the diagnosis of patients with disorders of sexual development. *Sex Dev.* 2007;1(4):222-9. X-2, X-3.
108. Arce B, Padron RS and Perez-Plaza M. Sterility caused by functional absence of ejaculatory ducts. *Reproduccion.* 1981 Apr-Jun;5(2):105-11. X-2, X-3.
109. Arena F, Arena S, Paolata A, et al. Is a complete urological evaluation necessary in all newborns with asymptomatic renal ectopia? *Int J Urol.* 2007 Jun;14(6):491-5. X-2, X-3.
110. Arena F, Nicotina PA, Romeo C, et al. Prenatal testicular torsion: ultrasonographic features, management and histopathological findings. *Int J Urol.* 2006 Feb;13(2):135-41. X-2, X-3.
111. Arenas MI, Lobo MV, Caso E, et al. Normal and pathological human testes express hormone-sensitive lipase and the lipid receptors CLA-1/SR-BI and CD36. *Hum Pathol.* 2004 Jan;35(1):34-42. X-2, X-3.
112. Armstrong GR, Buckley CH and Kelsey AM. Germ cell expression of placental alkaline phosphatase in male pseudohermaphroditism. *Histopathology.* 1991 Jun;18(6):541-7. X-2, X-3.
113. Arnbjornsson E and Kullendorff CM. Testicular torsion in children--bilateral or unilateral operation. *Acta Chir Scand.* 1985;151(5):425-7. X-2, X-3.
114. Arora R, Thakur JS, Azad RK, et al. Cisplatin-based chemotherapy: Add high-frequency audiometry in the regimen. *Indian Journal of Cancer.* 2009 01 Oct;46 (4):311-317. X-2, X-3.

115. Arrigo T, De Luca F, Maghnie M, et al. Relationships between neuroradiological and clinical features in apparently idiopathic hypopituitarism. *Eur J Endocrinol*. 1998 Jul;139(1):84-8. X-2, X-3.
116. Asakura Y, Toyota Y, Muroya K, et al. Endocrine and radiological studies in patients with molecularly confirmed CHARGE syndrome. *J Clin Endocrinol Metab*. 2008 Mar;93(3):920-4. X-2, X-3.
117. Aschim EL, Nordenskjold A, Giwercman A, et al. Linkage between cryptorchidism, hypospadias, and GGN repeat length in the androgen receptor gene. *J Clin Endocrinol Metab*. 2004 Oct;89(10):5105-9. X-3.
118. Ashley RA, Barthold JS and Kolon TF. Cryptorchidism: pathogenesis, diagnosis, treatment and prognosis. *Urol Clin North Am*. 2010 May;37(2):183-93. X-1.
119. Ashley RA, McGee SM, Isotoalo PA, et al. Clinical and pathological features associated with the testicular tumor of the adrenogenital syndrome. *J Urol*. 2007 Feb;177(2):546-9; discussion 549. X-2, X-3.
120. Ashley RA, Yu Z, Fung KM, et al. Developmental evaluation of aldo-keto reductase 1C3 expression in the cryptorchid testis. *Urology*. 2010 Jul;76(1):67-72. X-3, X-4, X-5, X-6.
121. Askin FB, Land VJ, Sullivan MP, et al. Occult testicular leukemia: testicular biopsy at three years continuous complete remission of childhood leukemia: a Southwest Oncology Group Study. *Cancer*. 1981 Feb 1;47(3):470-5. X-2, X-3.
122. Asklund C, Jorgensen N, Skakkebaek NE, et al. Increased frequency of reproductive health problems among fathers of boys with hypospadias. *Hum Reprod*. 2007 Oct;22(10):2639-46. X-2, X-3.
123. Assaf GJ. Non-palpable testicular lesion: the case for testicular preservation. *Can J Urol*. 2006 Apr;13(2):3034-8. X-2, X-3.
124. Assies J, Gooren LJG, Van Geel B, et al. Signs of testicular insufficiency in adrenomyeloneuropathy and neurologically asymptomatic X-linked adrenoleukodystrophy: A retrospective study. *International Journal of Andrology*. 1997;20 (5):315-321. X-2, X-3.
125. Assmus M, Svechnikov K, von Euler M, et al. Single subcutaneous administration of chorionic gonadotropin to rats induces a rapid and transient increase in testicular expression of pro-inflammatory cytokines. *Pediatr Res*. 2005 Jun;57(6):896-901. X-2, X-3.
126. Assumpcao JG, Ferraz LFC, Benedetti CE, et al. A naturally occurring deletion in the SRY promoter region affecting the Sp1 binding site is associated with sex reversal. *Journal of Endocrinological Investigation*. 2005;28 (7):651-656. X-2, X-3.
127. Atasoy C and Fitoz S. Gray-scale and color Doppler sonographic findings in intratesticular varicocele. *J Clin Ultrasound*. 2001 Sep;29(7):369-73. X-2, X-3.
128. Ates O, Aktug T, Hakguder G, et al. The role of simulated models in pediatric surgery to acquire diagnostic skills of inguino-scrotal disorders. *J Pediatr Surg*. 2003 Nov;38(11):1616-20. X-2, X-3.
129. Atilla MK, Sargin H, Yilmaz Y, et al. Undescended testes in adults: clinical significance of resistive index values of the testicular artery measured by Doppler ultrasound as a predictor of testicular histology. *J Urol*. 1997 Sep;158(3 Pt 1):841-3. X-2, X-3.
130. Atlas I and Stone N. Laparoscopy for evaluation of cryptorchid testis. *Urology*. 1992 Sep;40(3):256-8. X-4, X-5, X-6.
131. Atwell JD. Ascent of the testis: Fact or fiction. *British Journal of Urology*. 1985;57 (4):474-477. X-3, X-4, X-5, X-6.
132. Atwell JD and Levick P. Congenital hypertrophic pyloric stenosis and associated anomalies in the genitourinary tract. *J Pediatr Surg*. 1981 Dec;16(6):1029-35. X-2, X-3.
133. Atwood CS and Bowen RL. Metabolic clues regarding the enhanced performance of elite endurance athletes from orchiectomy-induced hormonal changes. *Med Hypotheses*. 2007;68(4):735-49. X-2, X-3.
134. Audry G, Johanet S, Achrafi H, et al. The risk of wound infection after inguinal incision in pediatric outpatient surgery. *Eur J Pediatr Surg*. 1994 Apr;4(2):87-9. X-2, X-3.
135. Auger J, Eustache F, Andersen AG, et al. Sperm morphological defects related to environment, lifestyle and medical history of 1001 male partners of pregnant women from four European cities. *Hum Reprod*. 2001 Dec;16(12):2710-7. X-2, X-3.
136. Auzanneau C, Norez C, Antigny F, et al. Transient receptor potential vanilloid 1 (TRPV1) channels in cultured rat Sertoli cells regulate an acid sensing chloride channel. *Biochemical Pharmacology*. 2008 15 Jan;75 (2):476-483. X-2, X-3.
137. Avci A, Erol B, Eken C, et al. Nine cases of nonpalpable testicular mass: an incidental finding in a large scale ultrasonography survey. *Int J Urol*. 2008 Sep;15(9):833-6. X-2, X-3.
138. Avila NA, Shawker TS, Jones JV, et al. Testicular adrenal rest tissue in congenital adrenal hyperplasia: serial sonographic and clinical findings. *AJR Am J Roentgenol*. 1999 May;172(5):1235-8. X-2, X-3.
139. Avlan D, Erdogan K, Cimen B, et al. The protective effect of selenium on ipsilateral and contralateral testes in testicular reperfusion injury. *Pediatr Surg Int*. 2005 Apr;21(4):274-8. X-2, X-3.
140. Avolio L, Chiari G, Caputo MA, et al. Abdominoscrotal hydrocele in childhood: is it really a rare entity? *Urology*. 2000 Dec 20;56(6):1047-9. X-2, X-3.
141. Awojobi OA and Nkposong EO. Seminal fluid changes after testicular torsion. *Urology*. 1986 Feb;27(2):109-11. X-2, X-3.

142. Aydos K, Soygur T, Kupeli B, et al. Testicular effects of vasectomy in rats: An ultrastructural and immunohistochemical study. *Urology*. 1998 Jun;51 (6):1051-1056. X-2, X-3.
143. Ayub K and Williams MP. A simple alternative technique of orchiopexy for high undescended testis. *Ann R Coll Surg Engl*. 1998 Jan;80(1):69-71. X-1.
144. Ayyash EH, Hamza A, Al Dahham A, et al. Laparoscopic inguinal hernia repair using the TEP technique: A preliminary report. *Kuwait Medical Journal*. 2008 June;40 (2):137-139. X-2, X-3.
145. Babaian RJ and Zagars GK. Testicular seminoma: the M. D. Anderson experience. An analysis of pathological and patient characteristics, and treatment recommendations. *J Urol*. 1988 Feb;139(2):311-4. X-2, X-3.
146. Baccetti B, Collodel G and Piomboni P. Apoptosis in human ejaculated sperm cells (notulae seminologicae 9). *J Submicrosc Cytol Pathol*. 1996 Oct;28(4):587-96. X-2, X-3.
147. Bach AM, Hann LE, Shi W, et al. Is there an increased incidence of contralateral testicular cancer in patients with intratesticular microlithiasis? *AJR Am J Roentgenol*. 2003 Feb;180(2):497-500. X-2, X-3.
148. Bach DW, Weissbach L and Hartlapp JH. Bilateral testicular tumor. *J Urol*. 1983 May;129(5):989-91. X-2, X-3.
149. Bach JR. Medical considerations of long-term survival of Werdnig-Hoffmann disease. *Am J Phys Med Rehabil*. 2007 May;86(5):349-55. X-2, X-3.
150. Bach T, Pfeiffer D and Tauber R. Baseline follicle-stimulating hormone is a strong predictor for the outcome of the gonadotrophin-releasing hormone test in young men with unilateral medium- or high-grade varicocele. *BJU Int*. 2006 Sep;98(3):619-22. X-2, X-3.
151. Backus ML, Mack LA, Middleton WD, et al. Testicular microlithiasis: imaging appearances and pathologic correlation. *Radiology*. 1994 Sep;192(3):781-5. X-2, X-3.
152. Bacon CM, Ye H, Diss TC, et al. Primary follicular lymphoma of the testis and epididymis in adults. *Am J Surg Pathol*. 2007 Jul;31(7):1050-8. X-2, X-3.
153. Baek M, Park SW, Moon KH, et al. Nationwide survey to evaluate the prevalence of varicoceles in South Korean middle school boys: a population based study. *Int J Urol*. 2011 Jan;18(1):55-60. X-2, X-3.
154. Baghdassarian R, Tansey LA, Martin DC, et al. Use of bupivacaine as block to relieve postoperative pain in pediatric orchiopexy and hernia repair. *Urology*. 1986 Jun;27(6):537-9. X-3, X-4, X-5, X-6.
155. Baglaj M and Carachi R. Neonatal bilateral testicular torsion: a plea for emergency exploration. *J Urol*. 2007 Jun;177(6):2296-9. X-2, X-3.
156. Bahador A, Hosseini SMV, Foroutan H, et al. Total inguinal canal mobilization in two-stage orchiopexy. *Iranian Journal of Medical Sciences*. 2009 June;34 (2):100-103. X-4, X-5, X-6.
157. Bahceci M, Ersay AR, Tuzcu A, et al. A novel missense mutation of 5-alpha reductase type 2 gene (SRD5A2) leads to severe male pseudohermaphroditism in a Turkish family. *Urology*. 2005 Aug;66(2):407-10. X-2, X-3.
158. Bajpai A, Kabra M and Menon PS. 21-Hydroxylase deficiency: clinical features, laboratory profile and pointers to diagnosis in Indian children. *Indian Pediatr*. 2004 Dec;41(12):1226-32. X-2, X-3.
159. Baker BA, Morley R and Lucas A. Plasma testosterone in preterm infants with cryptorchidism. *Arch Dis Child*. 1988 Oct;63(10):1198-200. X-3.
160. Bale PM, Howard NJ and Wright JE. Male pseudohermaphroditism in XY children with female phenotype. *Pediatr Pathol*. 1992 Jan-Feb;12(1):29-49. X-2, X-3.
161. Banhidly F, Acs N, Puho E, et al. A population-based case-control teratologic study of oral dipyrone treatment during pregnancy. *Drug Safety*. 2007;30 (1):59-70. X-2, X-3.
162. Banhidly F, Acs N, Puho EH, et al. Possible association of maternal haemorrhoid with congenital abnormalities in their children - A population-based case-control study. *Balkan Journal of Medical Genetics*. 2010 01 Jan;13 (1):23-33. X-2, X-3.
163. Banhidly F, Puho EH and Czeizel AE. Efficacy of medical care of epileptic pregnant women based on the rate of congenital abnormalities in their offspring. *Congenital Anomalies*. 2011 March;51 (1):34-42. X-3.
164. Banieghbal B. A simplified technique for giant inguinal hernia repair in infants. *Pediatr Surg Int*. 2008 Jun;24(6):737-9. X-1, X-2, X-3.
165. Baniel J, Foster RS, Rowland RG, et al. Complications of primary retroperitoneal lymph node dissection. *J Urol*. 1994 Aug;152(2 Pt 1):424-7. X-2, X-3.
166. Baniel J, Foster RS, Rowland RG, et al. Complications of primary retroperitoneal lymph-node dissection for low-stage testicular cancer. *World J Urol*. 1994;12(3):139-42. X-2, X-3.
167. Bani-Hani KE, Matani YS and Bani-Hani IH. Cryptorchidism and testicular neoplasia. *Saudi Med J*. 2003 Feb;24(2):166-9. X-3.
168. Banker BQ. Arthrogryposis multiplex congenita: spectrum of pathologic changes. *Hum Pathol*. 1986 Jul;17(7):656-72. X-2, X-3.
169. Barone JG, Christiano AP and Ward WS. DNA organization in patients with a history of cryptorchidism. *Urology*. 2000 Dec 20;56(6):1068-70. X-3.
170. Barqawi AZ, Blyth B, Jordan GH, et al. Role of laparoscopy in patients with previous negative exploration for impalpable testis. *Urology*. 2003 Jun;61(6):1234-7; discussion 1237. X-3, X-4, X-5, X-6.
171. Barrio R, De Luis D, Alonso M, et al. Induction of puberty with human chorionic gonadotropin and follicle-stimulating hormone in adolescent males with hypogonadotropic hypogonadism. *Fertility and Sterility*. 1999 Feb;71 (2):244-248. X-2, X-3.

172. Bar-Shira A, Rosner G, Rosner S, et al. Array-based comparative genome hybridization in clinical genetics. *Pediatric Research*. 2006 Sep;60 (3):353-358. X-3.
173. Barss P and Ennis S. Injuries caused by pigs in Papua New Guinea. *Medical Journal of Australia*. 1988;149 (11-12):649-656. X-2, X-3.
174. Bartfai Z, Kocsis J, Puho EH, et al. A population-based case-control teratologic study of promethazine use during pregnancy. *Reproductive Toxicology*. 2008 Feb;25 (2):276-285. X-2, X-3.
175. Bartfai Z, Somoskovi A, Puho EH, et al. No teratogenic effect of prenoxidiazine: A population-based case-control study. *Congenital Anomalies*. 2007 Mar;47 (1):16-21. X-2, X-3.
176. Barthold JS, Manson J, Regan V, et al. Reproductive hormone levels in infants with cryptorchidism during postnatal activation of the pituitary-testicular axis. *J Urol*. 2004 Oct;172(4 Pt 2):1736-41; discussion 1741. X-3.
177. Bartone FF and Schmidt MA. Cryptorchidism: incidence of chromosomal anomalies in 50 cases. *J Urol*. 1982 Jun;127(6):1105-6. X-2, X-3.
178. Bartsch G, Frank S, Marberger H, et al. Testicular torsion: late results with special regard to fertility and endocrine function. *J Urol*. 1980 Sep;124(3):375-8. X-2, X-3.
179. Basekim CC, Kizilkaya E, Pekkafuli Z, et al. Mumps epididymo-orchitis: sonography and color Doppler sonographic findings. *Abdom Imaging*. 2000 May-Jun;25(3):322-5. X-2, X-3.
180. Bashamboo A, Rahman MM, Prasad A, et al. Fate of SRY, PABY, DYS1, DYZ3 and DYZ1 loci in Indian patients harbouring sex chromosomal anomalies. *Mol Hum Reprod*. 2005 Feb;11(2):117-27. X-2, X-3.
181. Basiri A, Asl-Zare M, Sichani MM, et al. Laparoscopic bilateral retroperitoneal lymph node dissection in stage II testis cancer. *Urol J*. 2010 Summer;7(3):157-60. X-2, X-3.
182. Basiri A, Djaladat H, Mohammadi Sichani M, et al. *Journal of Endourology*. [Conference Abstract]. 2009 October;Conference: 27th WCE 2009 Munich Germany. Conference Start: 20091006 Conference End: 20091010. Conference: 27th WCE 2009 Munich Germany. Conference Start: 20091006 Conference End: 20091010. Conference Publication: (var.pagings). 23:A371. X-2, X-3.
183. Bassel YS, Scherz HC and Kirsch AJ. Scrotal incision orchiopexy for undescended testes with or without a patent processus vaginalis. *J Urol*. 2007 Apr;177(4):1516-8. X-4, X-5, X-6.
184. Bastida MG, Rey RA, Bergada I, et al. Establishment of testicular endocrine function impairment during childhood and puberty in boys with Klinefelter syndrome. *Clinical Endocrinology*. 2007 Dec;67 (6):863-870. X-2, X-3.
185. Battaglia A, Chines C and Carey JC. The FG syndrome: report of a large Italian series. *Am J Med Genet A*. 2006 Oct 1;140(19):2075-9. X-1, X-2, X-3.
186. Bayne A, Paduch D and Skoog SJ. Pressure, fluid and anatomical characteristics of abdominoscrotal hydroceles in infants. *J Urol*. 2008 Oct;180(4 Suppl):1720-3; discussion 1723. X-2, X-3.
187. Bayram MM and Kervancioglu R. Scrotal gray-scale and color Doppler sonographic findings in genitourinary brucellosis. *J Clin Ultrasound*. 1997 Oct;25(8):443-7. X-2, X-3.
188. Beard CM, Melton LJ, 3rd, O'Fallon WM, et al. Cryptorchism and maternal estrogen exposure. *Am J Epidemiol*. 1984 Nov;120(5):707-16. X-2, X-3.
189. Bebars GA, Zaki A, Dawood AR, et al. Laparoscopic versus open high ligation of the testicular veins for the treatment of varicocele. *JLS*. 2000 Jul-Sep;4(3):209-13. X-2, X-3.
190. Beck EM, Schlegel PN and Goldstein M. Intraoperative varicocele anatomy: a macroscopic and microscopic study. *J Urol*. 1992 Oct;148(4):1190-4. X-2, X-3.
191. Beck SD, Foster RS, Bihle R, et al. Is full bilateral retroperitoneal lymph node dissection always necessary for postchemotherapy residual tumor? *Cancer*. 2007 Sep 15;110(6):1235-40. X-2, X-3.
192. Beck SD, Peterson MD, Bihle R, et al. Short-term morbidity of primary retroperitoneal lymph node dissection in a contemporary group of patients. *J Urol*. 2007 Aug;178(2):504-6; discussion 506. X-2, X-3.
193. Beheshti M, Churchill BM and Mancor JFK. External genital abnormalities associated with Wilms tumor. *Urology*. 1984;24 (2):130-133. X-2, X-3.
194. Belgorosky A and Rivarola MA. Sex hormone binding globulin response to testosterone. An androgen sensitivity test. *Acta Endocrinol (Copenh)*. 1985 May;109(1):130-8. X-2, X-3.
195. Bellah RD, States LJ and Duckett JW. Pseudoprune-Belly syndrome: imaging findings and clinical outcome. *AJR Am J Roentgenol*. 1996 Dec;167(6):1389-93. X-2, X-3.
196. Bellinger MF. The blind-ending vas: the fate of the contralateral testis. *J Urol*. 1985 Apr;133(4):644-5. X-3, X-4, X-5, X-6.
197. Belman AB. Acquired undescended (ascended) testis: effects of human chorionic gonadotropin. *J Urol*. 1988 Nov;140(5 Pt 2):1189-90. X-3, X-4, X-5, X-6.
198. Belman AB and Rushton HG. Is the vanished testis always a scrotal event? *BJU Int*. 2001 Apr;87(6):480-3. X-2, X-3.
199. Belman AB and Rushton HG. Is an empty left hemiscrotum and hypertrophied right descended testis predictive of perinatal torsion? *J Urol*. 2003 Oct;170(4 Pt 2):1674-5; discussion 1675-6. X-2, X-3.
200. Beltran-Brown F and Villegas-Alvarez F. Clinical classification for undescended testes: experience in 1,010 orchidopexies. *J Pediatr Surg*. 1988 May;23(5):444-7. X-4, X-5, X-6.

201. Benacerraf BR and Bromley B. Sonographic finding of undescended testes in fetuses at 35-40 weeks: significance and outcome. *J Clin Ultrasound*. 1998 Feb;26(2):69-71. X-3.
202. Benedetto VD, Bagnara V, Guys JM, et al. A transvesical approach to mullerian duct remnants. *Pediatr Surg Int*. 1997 Feb;12(2-3):151-4. X-2, X-3.
203. Ben-Meir D, Deshpande A and Hutson JM. Re-exploration of the acute scrotum. *BJU Int*. 2006 Feb;97(2):364-6. X-2, X-3.
204. Benoff S, Goodwin LO, Millan C, et al. Deletions in L-type calcium channel alpha1 subunit testicular transcripts correlate with testicular cadmium and apoptosis in infertile men with varicoceles. *Fertil Steril*. 2005 Mar;83(3):622-34. X-2, X-3.
205. Benoff SH, Millan C, Hurley IR, et al. Bilateral increased apoptosis and bilateral accumulation of cadmium in infertile men with left varicocele. *Hum Reprod*. 2004 Mar;19(3):616-27. X-2, X-3.
206. Bercovici JP, Nahoul K, Ducasse M, et al. Leydig cell tumor with gynecomastia: further studies--the recovery after unilateral orchidectomy. *J Clin Endocrinol Metab*. 1985 Nov;61(5):957-62. X-2, X-3.
207. Berger AP and Hager J. Management of neonates with large abdominal wall defects and undescended testis. *Urology*. 2006 Jul;68(1):175-8. X-3, X-4, X-5, X-6.
208. Bergman JE, Bocca G, Hoefsloot LH, et al. Anosmia predicts hypogonadotropic hypogonadism in CHARGE syndrome. *J Pediatr*. 2011 Mar;158(3):474-9. X-2, X-3.
209. Bergmann M, Behre HM and Nieschlag E. Serum FSH and testicular morphology in male infertility. *Clin Endocrinol (Oxf)*. 1994 Jan;40(1):133-6. X-2, X-3.
210. Berhan Y, Lemma BE, Ergete W, et al. True hermaphrodite: very unusual type. *Ethiop Med J*. 2004 Jul;42(3):221-8. X-2, X-3.
211. Berkman WA, Price RB, Wheatley JK, et al. Varicoceles: a coaxial coil occlusion system. *Radiology*. 1984 Apr;151(1):73-7. X-2, X-3.
212. Berkmen F. Malignant lymphomas of the testis. *Radiology and Oncology*. 2003 Mar;37 (1):23-27+57. X-2, X-3.
213. Berkmen F and Alagol H. Germinal cell tumors of the testis in cryptorchids. *J Exp Clin Cancer Res*. 1998 Dec;17(4):409-12. X-3, X-4, X-5, X-6.
214. Berkmen F, Peker AF, Basay S, et al. Synchronous and metachronous bilateral germ cell tumours of the testis. *Radiology and Oncology*. 2000;34 (4):363-368. X-2, X-3.
215. Berkowitz GS and Lapinski RH. Risk factors for cryptorchidism: a nested case-control study. *Paediatr Perinat Epidemiol*. 1996 Jan;10(1):39-51. X-3.
216. Berkowitz GS, Lapinski RH, Godbold JH, et al. Maternal and neonatal risk factors for cryptorchidism. *Epidemiology*. 1995 Mar;6(2):127-31. X-3.
217. Bermudez M, Frank N, Bernal J, et al. High prevalence of CBS p.T191M mutation in homocystinuric patients from Colombia. *Hum Mutat*. 2006 Mar;27(3):296. X-2, X-3.
218. Bernal RM and Zaontz MR. *Journal of Urology*. [Conference Abstract]. 2009 April;Conference: 2009 American Urological Association (AUA) Annual Meeting Chicago, IL United States. Conference Start: 20090425 Conference End: 20090430. Conference: 2009 American Urological Association (AUA) Annual Meeting Chicago, IL United States. Conference Start: 20090425 Conference End: 20090430. Conference Publication: (var.pagings). 181 (4 SUPPL. 1):118. X-4, X-5, X-6.
219. Bernard J and Yi ES. Pulmonary thromboendarterectomy: a clinicopathologic study of 200 consecutive pulmonary thromboendarterectomy cases in one institution. *Hum Pathol*. 2007 Jun;38(6):871-7. X-2, X-3.
220. Bernstein L, Depue RH, Ross RK, et al. Higher maternal levels of free estradiol in first compared to second pregnancy: early gestational differences. *J Natl Cancer Inst*. 1986 Jun;76(6):1035-9. X-2, X-3.
221. Bernstein L, Pike MC, Depue RH, et al. Maternal hormone levels in early gestation of cryptorchid males: a case-control study. *Br J Cancer*. 1988 Sep;58(3):379-81. X-2, X-3.
222. Bertelsen A, Thorup J, Pedersen PV, et al. Intranasal LH-RH treatment of cryptorchidism. A clinical trial and 5 years follow-up. *Eur J Pediatr*. 1987;146 Suppl 2:S40-1. X-4, X-5, X-6.
223. Berthelsen JG. Sperm counts and serum follicle-stimulating hormone levels before and after radiotherapy and chemotherapy in men with testicular germ cell cancer. *Fertil Steril*. 1984 Feb;41(2):281-6. X-2, X-3.
224. Berthelsen JG, Engelholm SA, von der Maase H, et al. Serum testosterone, LH, and FSH in patients with testicular cancer before and after radio- and chemotherapy. *Scand J Urol Nephrol*. 1983;17(3):287-90. X-2, X-3.
225. Berthelsen JG and Skakkebaek NE. Gonadal function in men with testis cancer. *Fertil Steril*. 1983 Jan;39(1):68-75. X-2, X-3.
226. Berthelsen JG, Skakkebaek NE, von der Maase H, et al. Screening for carcinoma in situ of the contralateral testis in patients with germinal testicular cancer. *Br Med J (Clin Res Ed)*. 1982 Dec 11;285(6356):1683-6. X-2, X-3.
227. Bertini V, Bertelloni S, Valetto A, et al. Homeobox HOXA10 gene analysis in cryptorchidism. *J Pediatr Endocrinol Metab*. 2004 Jan;17(1):41-5. X-3.
228. Bettocchi C, Parkinson MC, Ralph DJ, et al. Clinical aspects associated with Sertoli-cell-only histology. *Br J Urol*. 1998 Oct;82(4):534-7. X-2, X-3.

229. Bhansali A, Walia R, Singh R, et al. Disorders of sex development: A study of ninety-five patients. *Endocrinologist*. 2009 May-June;19 (3):98-101. X-2, X-3.
230. Bhasin SD and Shrikhande SS. Secondary carcinoma of testis--a clinicopathologic study of 10 cases. *Indian J Cancer*. 1990 Jun;27(2):83-90. X-2, X-3.
231. Bhatnagar AM, Mohite PN and Suthar M. Fournier's gangrene: a review of 110 cases for aetiology, predisposing conditions, microorganisms, and modalities for coverage of necrosed scrotum with bare testes. *N Z Med J*. 2008 Jun 6;121(1275):46-56. X-1, X-2, X-3.
232. Bhatti AZ and Rasool MI. Darning vs Bassini repair in primary unilateral inguinal hernia. *Medical Forum Monthly*. 2002 01 Jun;13 (6):23-25. X-2, X-3.
233. Bianchi A. Microvascular orchiopexy for high undescended testes. *Br J Urol*. 1984 Oct;56(5):521-4. X-3, X-4, X-5, X-6.
234. Bianchi G, Beltrami P, Giusti G, et al. Unilateral laparoscopic retroperitoneal lymph node dissection for clinical stage I nonseminomatous germ cell testicular neoplasm. *Eur Urol*. 1998;33(2):190-4. X-2, X-3.
235. Bierich JR. Undescended testes: treatment with gonadotropin. *Eur J Pediatr*. 1982 Dec;139(4):275-9. X-1.
236. Biermann K, Goke F, Nettersheim D, et al. c-KIT is frequently mutated in bilateral germ cell tumours and down-regulated during progression from intratubular germ cell neoplasia to seminoma. *J Pathol*. 2007 Nov;213(3):311-8. X-2, X-3.
237. Biggs ML, Baer A and Critchlow CW. Maternal, delivery, and perinatal characteristics associated with cryptorchidism: a population-based case-control study among births in Washington State. *Epidemiology*. 2002 Mar;13(2):197-204. X-3.
238. Bigliardi E and Vegni-Talluri M. Electron microscopic study of interstitial cells in cryptorchid human testes. I: Interstitial cells in prepubertal age. *Andrologia*. 1982 May-Jun;14(3):276-83. X-2, X-3.
239. Bigot JM, Le Blanche AF, Carette MF, et al. Anastomoses between the spermatic and visceral veins: a retrospective study of 500 consecutive patients. *Abdom Imaging*. 1997 Mar-Apr;22(2):226-32. X-2, X-3.
240. Bilinska B, Kotula-Balak M and Sadowska J. Morphology and function of human Leydig cells in vitro. Immunocytochemical and radioimmunological analyses. *Eur J Histochem*. 2009 Jan-Mar;53(1):35-42. X-2, X-3.
241. Billingsley G, Bin J, Fieggen KJ, et al. Mutations in chaperonin-like BBS genes are a major contributor to disease development in a multiethnic Bardet-Biedl syndrome patient population. *J Med Genet*. 2010 Jul;47(7):453-63. X-2, X-3.
242. Binder G, Martin DD, Kanther I, et al. The course of neonatal cholestasis in congenital combined pituitary hormone deficiency. *J Pediatr Endocrinol Metab*. 2007 Jun;20(6):695-702. X-2, X-3.
243. Binder G, Neuer K, Ranke MB, et al. PTPN11 mutations are associated with mild growth hormone resistance in individuals with Noonan syndrome. *J Clin Endocrinol Metab*. 2005 Sep;90(9):5377-81. X-2, X-3.
244. Bingol-Kologlu M, Demirci M, Buyukpamukcu N, et al. Cremasteric reflexes of boys with descended, retractile, or undescended testes: an electrophysiological evaluation. *J Pediatr Surg*. 1999 Mar;34(3):430-4. X-3.
245. Bingol-Kologlu M, Sara Y, Tanyel FC, et al. Contractility and electrophysiological parameters of cremaster muscles of boys with a hernia or undescended testis. *J Pediatr Surg*. 1998 Oct;33(10):1490-4. X-2, X-3.
246. Bingol-Kologlu M, Tanyel FC, Akcoren Z, et al. A comparative histopathologic and immunohistopathologic evaluation of cremaster muscles from boys with various inguinoscrotal pathologies. *Eur J Pediatr Surg*. 2001 Apr;11(2):110-5. X-2, X-3.
247. Bingol-Kologlu M, Tanyel FC, Anlar B, et al. Cremasteric reflex and retraction of a testis. *J Pediatr Surg*. 2001 Jun;36(6):863-7. X-2, X-3.
248. Bird DJ and Seiler MW. Annulate lamellae and single-pore complexes in human spermatogonia. *J Submicrosc Cytol*. 1986 Oct;18(4):823-8. X-2, X-3.
249. Bissada NK, el Senoussi M, Hanash KA, et al. Testicular seminomas in Saudi Arabia: clinical characteristics, prognostic indicators, and recommendations for management. *J Surg Oncol*. 1986 Oct;33(2):136-9. X-2, X-3.
250. Bjoro K, Jr. and Dybvik T. Congenital abnormalities and growth patterns among cryptorchidic boys. *Ann Chir Gynaecol*. 1983;72(6):342-6. X-3, X-4, X-5, X-6.
251. Blatt J, Sherins RJ, Niebrugge D, et al. Leydig cell function in boys following treatment for testicular relapse of acute lymphoblastic leukemia. *J Clin Oncol*. 1985 Sep;3(9):1227-31. X-2, X-3.
252. Blau H, Freud E, Mussaffi H, et al. Urogenital abnormalities in male children with cystic fibrosis. *Arch Dis Child*. 2002 Aug;87(2):135-8. X-2, X-3.
253. Bloom DA. Two-step orchiopexy with pelviscopic clip ligation of the spermatic vessels. *J Urol*. 1991 May;145(5):1030-3. X-4, X-5, X-6.
254. Blumenfeld Z, Kerner H, Makler A, et al. Clinical, endocrine and ultrastructural study of XY gonadal dysgenesis. A case report. *J Reprod Med*. 1985 Mar;30(3):211-6. X-2, X-3.
255. Bockers TM, Nieschlag E, Kreutz MR, et al. Localization of follicle-stimulating hormone (FSH) immunoreactivity and hormone receptor mRNA in testicular tissue of infertile men. *Cell Tissue Res*. 1994 Dec;278(3):595-600. X-1, X-2, X-3.
256. Boeckx W, Vereecken R and Depuydt K. Microsurgery for intra-abdominal testicular retention. *European Journal of Obstetrics Gynecology and Reproductive Biology*. 1998 01 Dec;81 (2):191-196. X-4, X-5, X-6.

257. Bogatcheva NV, Ferlin A, Feng S, et al. T222P mutation of the insulin-like 3 hormone receptor LGR8 is associated with testicular maldescent and hinders receptor expression on the cell surface membrane. *Am J Physiol Endocrinol Metab.* 2007 Jan;292(1):E138-44. X-2, X-3.
258. Boggis AR and Rowlatt RJ. A study of the sources of delay in the diagnosis and treatment of undescended testicle. *J R Coll Gen Pract.* 1984 Aug;34(265):440-1. X-2, X-3.
259. Bohring C and Krause W. Serum levels of inhibin B in men with different causes of spermatogenic failure. *Andrologia.* 1999 May;31(3):137-41. X-2, X-3.
260. Boisen KA, Chellakooty M, Schmidt IM, et al. Hypospadias in a cohort of 1072 Danish newborn boys: prevalence and relationship to placental weight, anthropometrical measurements at birth, and reproductive hormone levels at three months of age. *J Clin Endocrinol Metab.* 2005 Jul;90(7):4041-6. X-2, X-3.
261. Boisen KA, Kaleva M, Main KM, et al. Difference in prevalence of congenital cryptorchidism in infants between two Nordic countries. *Lancet.* 2004 Apr 17;363(9417):1264-9. X-3.
262. Bokemeyer C, Berger CC, Hartmann JT, et al. Analysis of risk factors for cisplatin-induced ototoxicity in patients with testicular cancer. *Br J Cancer.* 1998 Apr;77(8):1355-62. X-2, X-3.
263. Bokemeyer C, Frank B, Schoffski P, et al. Phantom sensations after orchiectomy for testicular cancer. *International Journal of Oncology.* 1993;2 (4):633-636. X-2, X-3.
264. Bokemeyer C, Schmoll HJ, Schoffski P, et al. Bilateral testicular tumours: prevalence and clinical implications. *Eur J Cancer.* 1993;29A(6):874-6. X-2, X-3.
265. Bonduelle M, Legein J, Derde MP, et al. Comparative follow-up study of 130 children born after intracytoplasmic sperm injection and 130 children born after in-vitro fertilization. *Hum Reprod.* 1995 Dec;10(12):3327-31. X-2, X-3.
266. Bonner MR, McCann SE and Moysich KB. Dietary factors and the risk of testicular cancer. *Nutr Cancer.* 2002;44(1):35-43. X-2, X-3.
267. Bonney T, Hutson J, Southwell B, et al. Update on congenital versus acquired undescended testes: incidence, diagnosis and management. *ANZ J Surg.* 2008 Nov;78(11):1010-3. X-1.
268. Bonney T, Southwell B, Donnath S, et al. Orchidopexy trends in the paediatric population of Victoria, 1999-2006. *J Pediatr Surg.* 2009 Feb;44(2):427-31. X-4, X-5, X-6.
269. Bono AV and Roggia A. The anti-inflammatory action of flurbiprofen suppositories in paediatric urology in comparison with co-trimoxazole. *J Int Med Res.* 1984;12(2):128-31. X-4, X-5, X-6.
270. Booth WD and Baldwin BA. Lack of effect on sexual behaviour or the development of testicular function after removal of olfactory bulbs in prepubertal boars. *J Reprod Fertil.* 1980 Jan;58(1):173-82. X-2, X-3.
271. Bor P, Hindkjaer J, Kolvraa S, et al. Screening for Y microdeletions in men with testicular cancer and undescended testis. *J Assist Reprod Genet.* 2006 Jan;23(1):41-5. X-2, X-3.
272. Borer JG, Nitti VW and Glassberg KI. Mixed gonadal dysgenesis and dysgenetic male pseudohermaphroditism. *J Urol.* 1995 Apr;153(4):1267-73. X-2, X-3.
273. Bosenberg AT and Ratcliffe S. The respiratory effects of tramadol in children under halothane anaesthesia. *Anaesthesia.* 1998 Oct;53(10):960-4. X-2, X-3.
274. Bosl GJ, Geller N, Cirincione C, et al. Interrelationships of histopathology and other clinical variables in patients with germ cell tumors of the testis. *Cancer.* 1983 Jun 1;51(11):2121-5. X-2, X-3.
275. Bouloux P, Warne DW and Loumaye E. Efficacy and safety of recombinant human follicle-stimulating hormone in men with isolated hypogonadotropic hypogonadism. *Fertility and Sterility.* 2002;77 (2):270-273. X-2, X-3.
276. Bouloux PMG, Nieschlag E, Burger HG, et al. Induction of Spermatogenesis by Recombinant Follicle-Stimulating Hormone (Puregon) in Hypogonadotropic Azoospermic Men Who Failed to Respond to Human Chorionic Gonadotropin Alone. *Journal of Andrology.* 2003 Jul;24 (4):604-611. X-2, X-3.
277. Bouvattier C, Mignot B, Lefevre H, et al. Impaired sexual activity in male adults with partial androgen insensitivity. *Journal of Clinical Endocrinology and Metabolism.* 2006;91 (9):3310-3315. X-2, X-3.
278. Bouvattier C, Tauber M, Jouret B, et al. Gonadotropin treatment of hypogonadotropic hypogonadal adolescents. *J Pediatr Endocrinol Metab.* 1999 Apr;12 Suppl 1:339-44. X-2, X-3.
279. Boyd HA, Myrup C, Wohlfahrt J, et al. Maternal serum alpha-fetoprotein level during pregnancy and isolated cryptorchidism in male offspring. *Am J Epidemiol.* 2006 Sep 1;164(5):478-86. X-3.
280. Boyle KE, Thomas AJ, Jr., Marmar JL, et al. Sperm harvesting and cryopreservation during vasectomy reversal is not cost effective. *Fertil Steril.* 2006 Apr;85(4):961-4. X-2, X-3.
281. Bozlu M, Coskun B, Cayan S, et al. Inhibition of poly(adenosine diphosphate-ribose) polymerase decreases long-term histologic damage in testicular ischemia-reperfusion injury. *Urology.* 2004 Apr;63(4):791-5. X-2, X-3.
282. Brabrand S, Fossa SD, Cvancarova M, et al. Androgen substitution with testosterone undecanoate in survivors of bilateral testicular cancer requires individually-adjusted injection intervals. *BJU International.* 2011 April;107 (7):1080-1087. X-2, X-3.
283. Bracken RB, Johnson DE and Frazier OH. The role of surgery following chemotherapy in stage III germ cell naoplasms. *Journal of Urology.* 1983;129 (1):39-43. X-2, X-3.
284. Bracken RB and Smith KD. Is semen cryopreservation helpful in testicular cancer? *Urology.* 1980 Jun;15(6):581-3. X-2, X-3.

285. Braga LH, Lorenzo AJ, Pippi Salle JL, et al. Patency of the "third inguinal ring" in children with unilateral cryptorchidism: fact or fiction? *Eur J Pediatr Surg.* 2008 Aug;18(4):237-40. X-4, X-5, X-6.
286. Bramwell RG, Bullen C and Radford P. Caudal block for postoperative analgesia in children. *Anaesthesia.* 1982 Oct;37(10):1024-8. X-2, X-3.
287. Brancati F, D'Avanzo MG, Digilio MC, et al. KBG syndrome in a cohort of Italian patients. *American Journal of Medical Genetics.* 2004 01 Dec;131 A (2):144-149. X-2, X-3.
288. Branscheid D, Krysa S, Wollkopf G, et al. Does ND-YAG laser extend the indications for resection of pulmonary metastases? *Eur J Cardiothorac Surg.* 1992;6(11):590-6; discussion 597. X-2, X-3.
289. Braun MM, Caporaso NE, Page WF, et al. Prevalence of a history of testicular cancer in a cohort of elderly twins. *Acta Genet Med Gemellol (Roma).* 1995;44(3-4):189-92. X-2.
290. Brauner R, Caltabiano P, Rappaport R, et al. Leydig cell insufficiency after testicular irradiation for acute lymphoblastic leukemia. *Horm Res.* 1988;30(2-3):111-4. X-2, X-3.
291. Braunstein J, Afshar K and MacNeily AE. Cryptorchidism: the veracity of online information accessible to the public. *J Pediatr Surg.* 2007 Oct;42(10):1745-8. X-2, X-3.
292. Bredael JJ, Vugrin D and Whitmore WF, Jr. Selected experience with surgery and combination chemotherapy in the treatment of nonseminomatous testis tumors. *J Urol.* 1983 May;129(5):985-8. X-2, X-3.
293. Breman AM, Ramocki MB, Kang SHL, et al. MECP2 duplications in six patients with complex sex chromosome rearrangements. *European Journal of Human Genetics.* 2011 April;19 (4):409-415. X-2, X-3.
294. Bremholm Rasmussen T, Ingerslev HJ and Hostrup H. Bilateral spontaneous descent of the testis after the age of 10: subsequent effects on fertility. *Br J Surg.* 1988 Aug;75(8):820-3. X-2, X-3.
295. Bren A and Kandus A. Our experience with epoetins in treating renal anemia. *Ther Apher Dial.* 2005 Jun;9(3):202-4. X-1, X-2, X-3.
296. Brennemann W, Brensing KA, Leipner N, et al. Attempted protection of spermatogenesis from irradiation in patients with seminoma by D-Tryptophan-6 luteinizing hormone releasing hormone. *Clin Investig.* 1994 Nov;72(11):838-42. X-2, X-3.
297. Brennemann W, Stoffel-Wagner B, Helmers A, et al. Gonadal function of patients treated with cisplatin based chemotherapy for germ cell cancer. *J Urol.* 1997 Sep;158(3 Pt 1):844-50. X-2, X-3.
298. Brennemann W, Stoffel-Wagner B, Wichers M, et al. Pretreatment follicle-stimulating hormone: a prognostic serum marker of spermatogenesis status in patients treated for germ cell cancer. *J Urol.* 1998 Jun;159(6):1942-6. X-2, X-3.
299. Breslow NE and Beckwith JB. Epidemiological features of Wilms' tumor: results of the National Wilms' Tumor Study. *J Natl Cancer Inst.* 1982 Mar;68(3):429-36. X-2, X-3.
300. Breslow NE, Collins AJ, Ritchey ML, et al. End stage renal disease in patients with Wilms tumor: results from the National Wilms Tumor Study Group and the United States Renal Data System. *J Urol.* 2005 Nov;174(5):1972-5. X-2, X-3.
301. Breyer BN, DiSandro M, Baskin LS, et al. Obesity does not decrease the accuracy of testicular examination in anesthetized boys with cryptorchidism. *J Urol.* 2009 Feb;181(2):830-4. X-3, X-4, X-5, X-6.
302. Briggs TP, Anson KM, Jones A, et al. Urological day case surgery in elderly and medically unfit patients using sedoanalgesia: What are the limits? *British Journal of Urology.* 1995;75 (6):708-711. X-2, X-3.
303. Brodie A, Inkster S and Yue W. Aromatase expression in the human male. *Mol Cell Endocrinol.* 2001 Jun 10;178(1-2):23-8. X-2, X-3.
304. Brook NR, Harper SJ, Waller JR, et al. A consecutive series of 70 laparoscopic donor nephrectomies demonstrates the safety of this new operation. *Transplant Proc.* 2005 Mar;37(2):627-8. X-2, X-3.
305. Brown DL, Benson CB, Doherty FJ, et al. Cystic testicular mass caused by dilated rete testis: sonographic findings in 31 cases. *AJR Am J Roentgenol.* 1992 Jun;158(6):1257-9. X-2, X-3.
306. Brown JJ, Wacogne I, Fleckney S, et al. Achieving early surgery for undescended testes: quality improvement through a multifaceted approach to guideline implementation. *Child Care Health Dev.* 2004 Mar;30(2):97-102. X-4, X-5, X-6.
307. Brown JM, Hammers LW, Barton JW, et al. Quantitative Doppler assessment of acute scrotal inflammation. *Radiology.* 1995 Nov;197(2):427-31. X-2, X-3.
308. Brown LM, Pottern LM and Hoover RN. Testicular cancer in young men: the search for causes of the epidemic increase in the United States. *J Epidemiol Community Health.* 1987 Dec;41(4):349-54. X-2, X-3.
309. Brugnol F, Janny L, Artonne C, et al. Activated caspases in thawed epididymal and testicular spermatozoa of patients with congenital bilateral absence of the vas deferens and intracytoplasmic sperm injection outcome. *Fertil Steril.* 2009 Aug;92(2):557-64. X-2, X-3.
310. Buijnen CJ, Vogels HD and Beasley SW. Review of the extent to which orchidopexy is performed at the optimal age: implications for health services. *ANZ J Surg.* 2008 Nov;78(11):1006-9. X-4, X-5, X-6.
311. Bruning G, Dierichs R, Stumpel C, et al. Sertoli cell nuclear changes in human testicular biopsies as revealed by three dimensional reconstruction. *Andrologia.* 1993 Nov-Dec;25(6):311-6. X-2, X-3.
312. Bruun E, Frimodt-Moller C, Giwercman A, et al. Testicular biopsy as an outpatient procedure in screening for carcinoma-in-situ: complications and the patient's acceptance. *Int J Androl.* 1987 Feb;10(1):199-202. X-2, X-3.

313. Brydoy M, Fossa SD, Klepp O, et al. Paternity following treatment for testicular cancer. *J Natl Cancer Inst.* 2005 Nov 2;97(21):1580-8. X-2, X-3.
314. Brydoy M, Fossa SD, Klepp O, et al. Paternity and testicular function among testicular cancer survivors treated with two to four cycles of cisplatin-based chemotherapy. *Eur Urol.* 2010 Jul;58(1):134-40. X-2, X-3.
315. Brydoy M, Oldenburg J, Klepp O, et al. Observational study of prevalence of long-term Raynaud-like phenomena and neurological side effects in testicular cancer survivors. *J Natl Cancer Inst.* 2009 Dec 16;101(24):1682-95. X-2, X-3.
316. Buch B, Galan JJ, Lara M, et al. Absence of de novo Y-chromosome microdeletions in male children conceived through intracytoplasmic sperm injection. *Fertil Steril.* 2004 Dec;82(6):1679-80. X-2, X-3.
317. Buchanan GR, Boyett JM, Pollock BH, et al. Improved treatment results in boys with overt testicular relapse during or shortly after initial therapy for acute lymphoblastic leukemia. A Pediatric Oncology group study. *Cancer.* 1991 Jul 1;68(1):48-55. X-2, X-3.
318. Buchholz NP, Biyabani R, Herzig MJU, et al. Persistent mullerian duct syndrome. *European Urology.* 1998;34(3):230-232. X-2, X-3.
319. Buchter D, Behre HM, Kliesch S, et al. Pulsatile GnRH or human chorionic gonadotropin/human menopausal gonadotropin as effective treatment for men with hypogonadotropic hypogonadism: a review of 42 cases. *Eur J Endocrinol.* 1998 Sep;139(3):298-303. X-2, X-3.
320. Buckett WM, Chian RC, Holzer H, et al. Obstetric outcomes and congenital abnormalities after in vitro maturation, in vitro fertilization, and intracytoplasmic sperm injection. *Obstetrics and Gynecology.* 2007 Oct;110(4):885-891. X-3.
321. Buffat C, Patrat C, Merlet F, et al. ICSI outcomes in obstructive azoospermia: influence of the origin of surgically retrieved spermatozoa and the cause of obstruction. *Hum Reprod.* 2006 Apr;21(4):1018-24. X-2, X-3.
322. Bujan L, Mieusset R, Mansat A, et al. Testicular size in infertile men: relationship to semen characteristics and hormonal blood levels. *Br J Urol.* 1989 Dec;64(6):632-7. X-2, X-3.
323. Bukowski TP, Wacksman J, Billmire DA, et al. Testicular autotransplantation: A 17-year review of an effective approach to the management of the intra-abdominal testis. *Journal of Urology.* 1995;154(2 Pt 1):558-561. X-4, X-5, X-6.
324. Bukowski TP, Wacksman J, Billmire DA, et al. Testicular autotransplantation for the intra-abdominal testis. *Microsurgery.* 1995;16(5):290-5. X-4, X-5, X-6.
325. Bunin GR, Felice MA, Davidson W, et al. Medical radiation exposure and risk of retinoblastoma resulting from new germline RB1 mutation. *International Journal of Cancer.* 2011 01 May;128(10):2393-2404. X-2, X-3.
326. Burgu B, Aydogdu O, Huang R, et al. *Journal of Urology.* [Conference Abstract]. 2011 April;Conference: 2011 Annual Meeting of the American Urological Association, AUA Washington, DC United States. Conference Start: 20110514 Conference End: 20110519. Conference: 2011 Annual Meeting of the American Urological Association, AUA Washington, DC United States. Conference Start: 20110514 Conference End: 20110519. Conference Publication: (var.pagings). 185(4 SUPPL. 1):e228. X-3.
327. Burjonrappa SC, Al Hazmi H, Barrieras D, et al. Laparoscopic orchidopexy: the easy way to go. *J Pediatr Surg.* 2009 Nov;44(11):2168-72. X-4, X-5, X-6.
328. Burke AP and Mostofi FK. Intratubular malignant germ cells in testicular biopsies: clinical course and identification by staining for placental alkaline phosphatase. *Mod Pathol.* 1988 Nov;1(6):475-9. X-2, X-3.
329. Burton BK, Schulz CJ and Burd LI. Limb anomalies associated with chorionic villus sampling. *Obstet Gynecol.* 1992 May;79(5 (Pt 1)):726-30. X-2, X-3.
330. Busoni P, Crescioli M, Agostino R, et al. Vomiting and common paediatric surgery. *Paediatr Anaesth.* 2000;10(6):639-43. X-2, X-3.
331. Bussen S, Sutterlin M, Steck T, et al. Semen parameters in patients with unilateral testicular cancer compared to patients with other malignancies. *Arch Gynecol Obstet.* 2004 Mar;269(3):196-8. X-2, X-3.
332. Butler JV, Whittington JE, Holland AJ, et al. Prevalence of, and risk factors for, physical ill-health in people with Prader-Willi syndrome: A population-based study. *Developmental Medicine and Child Neurology.* 2002;44(4):248-255. X-2, X-3.
333. Butler MG and Thompson T. Prader-Willi syndrome clinical and genetic findings. *Endocrinologist.* 2000;10(4 SUPPL. 1):3S-16S. X-1, X-2, X-3.
334. Byrd W, Bennett MJ, Carr BR, et al. Regulation of biologically active dimeric inhibin A and B from infancy to adulthood in the male. *J Clin Endocrinol Metab.* 1998 Aug;83(8):2849-54. X-2, X-3.
335. Caesar RE and Kaplan GW. Incidence of the bell-clapper deformity in an autopsy series. *Urology.* 1994 Jul;44(1):114-6. X-2, X-3.
336. Caesar RE and Kaplan GW. The incidence of the cremasteric reflex in normal boys. *J Urol.* 1994 Aug;152(2 Pt 2):779-80. X-2, X-3.
337. Cai LQ, Fratianni CM, Gautier T, et al. Dihydrotestosterone regulation of semen in male pseudohermaphrodites with 5 alpha-reductase-2 deficiency. *J Clin Endocrinol Metab.* 1994 Aug;79(2):409-14. X-2, X-3.
338. Cakan M and Altug U. Induction of spermatogenesis by inguinal varicocele repair in azoospermic men. *Arch Androl.* 2004 May-Jun;50(3):145-50. X-2, X-3.

339. Caldamone AA, Al-Juburi A and Cockett AT. The varicocele: elevated serotonin and infertility. *J Urol.* 1980 May;123(5):683-5. X-2, X-3.
340. Caldamone AA and Amaral JF. Laparoscopic stage 2 Fowler-Stephens orchiopexy. *Journal of Urology.* 1994;152 (4):1253-1256. X-4, X-5, X-6.
341. Caldamone AA and Rabinowitz R. Outpatient orchiopexy. *J Urol.* 1982 Feb;127(2):286-8. X-4, X-5, X-6.
342. Calestroupat JP, Sanchez-Salas R, Cathelineau X, et al. Postchemotherapy laparoscopic retroperitoneal lymph node dissection in nonseminomatous germ-cell tumor. *J Endourol.* 2009 Apr;23(4):645-50. X-2, X-3.
343. Calleary JG, Masood J and Hill JT. Chronic epididymitis: is epididymectomy a valid surgical treatment? *Int J Androl.* 2009 Oct;32(5):468-72. X-2, X-3.
344. Callery CD, Holmes EC, Vernon S, et al. Resection of pulmonary metastases from nonseminomatous testicular tumors. Correlation of clinical and histological features with treatment outcome. *Cancer.* 1983 Mar 15;51(6):1152-8. X-2, X-3.
345. Callewaert PR, Rahnama'i MS, Bialosterski BT, et al. Scrotal approach to both palpable and impalpable undescended testes: should it become our first choice? *Urology.* 2010 Jul;76(1):73-6. X-4, X-5, X-6.
346. Callewaert PRH and Van Kerrebroeck P. New insights into perinatal testicular torsion. *European Journal of Pediatrics.* 2010 June;169 (6):705-712. X-2, X-3.
347. Campagnola S, Fasoli L, Flessati P, et al. Vas deferens anomalies in paediatric age. *Minerva Pediatr.* 1999 Jul-Aug;51(7-8):265-9. X-2, X-3.
348. Canale D, Bartelloni M, Negroni A, et al. Zinc in human semen. *Int J Androl.* 1986 Dec;9(6):477-80. X-2, X-3.
349. Canales BK, Zapzalka DM, Ercole CJ, et al. Prevalence and effect of varicoceles in an elderly population. *Urology.* 2005 Sep;66 (3):627-631. X-2, X-3.
350. Canavese F, Lala R, Valfre L, et al. Effectiveness of primary inguinal orchiopexy as treatment of non-palpable testes in the first two years of age. *Minerva Pediatr.* 2010 Jun;62(3):245-8. X-4, X-5, X-6.
351. Cantwell BMJ, Mannix KA and Harris AL. Back pain - A presentation of metastatic testicular germ cell tumours. *Lancet.* 1987;1 (8527):262-264. X-2, X-3.
352. Cap J, Foltinova A and Misikova Z. Prognostic significance of testicular relapse in boys with acute lymphoblastic leukemia. *Neoplasma.* 1992;39(2):115-8. X-2, X-3.
353. Capello SA, Giorgi LJ, Jr. and Kogan BA. Orchiopexy practice patterns in New York State from 1984 to 2002. *J Urol.* 2006 Sep;176(3):1180-3. X-4, X-5, X-6.
354. Caraway NP, Fanning CV, Amato RJ, et al. Fine-needle aspiration cytology of seminoma: a review of 16 cases. *Diagn Cytopathol.* 1995 Jun;12(4):327-33. X-2, X-3.
355. Carbone DJ, Jr., Shah A, Thomas AJ, Jr., et al. Partial obstruction, not antisperm antibodies, causing infertility after vasovasostomy. *J Urol.* 1998 Mar;159(3):827-30. X-2, X-3.
356. Carbone F, Giordano F, Nori F, et al. The possible role of endocrine disrupting chemicals in the aetiology of cryptorchidism and hypospadias: A population-based case-control study in rural Sicily. *International Journal of Andrology.* 2007 Feb;30 (1):3-13. X-3.
357. Carcavilla A, Alonso M, Ezquieta B, et al. An XX male with an intratubular undifferentiated germ cell neoplasia. *Fertil Steril.* 2008 Nov;90(5):2005 e3-5. X-2, X-3.
358. Carizza C, Antiba A, Palazzi J, et al. Testicular maldescent and infertility. *Andrologia.* 1990 May-Jun;22(3):285-8. X-2.
359. Carlsen E, Giwercman A, Keiding N, et al. Declining semen quality and increasing incidence of testicular cancer: is there a common cause? *Environ Health Perspect.* 1995 Oct;103 Suppl 7:137-9. X-1, X-2, X-3.
360. Carmignani L, Colombo R, Gadda F, et al. Conservative surgical therapy for leydig cell tumor. *J Urol.* 2007 Aug;178(2):507-11; discussion 511. X-2, X-3.
361. Carmignani L, Gadda F, Gazzano G, et al. High incidence of benign testicular neoplasms diagnosed by ultrasound. *J Urol.* 2003 Nov;170(5):1783-6. X-2, X-3.
362. Carmignani L, Gadda F, Mancini M, et al. Detection of testicular ultrasonographic lesions in severe male infertility. *J Urol.* 2004 Sep;172(3):1045-7. X-2, X-3.
363. Carmignani L, Morabito A, Gadda F, et al. Prognostic parameters in adult impalpable ultrasonographic lesions of the testicle. *Journal of Urology.* 2005 Sep;174 (3):1035-1038. X-1, X-2.
364. Carmignani L, Salvioni R, Gadda F, et al. Long-term followup and clinical characteristics of testicular Leydig cell tumor: experience with 24 cases. *J Urol.* 2006 Nov;176(5):2040-3; discussion 2043. X-2, X-3.
365. Carney JA, Gordon H and Carpenter PC. The complex of myxomas, spotty pigmentation, and endocrine overactivity. *Medicine.* 1985;64 (4):270-283. X-2, X-3.
366. Caron P, Chauvin S, Christin-Maitre S, et al. Resistance of hypogonadic patients with mutated GnRH receptor genes to pulsatile GnRH administration. *J Clin Endocrinol Metab.* 1999 Mar;84(3):990-6. X-2, X-3.
367. Carreno J, Rivas A, Granada A, et al. Exposure of young men to organochlorine pesticides in Southern Spain. *Environ Res.* 2007 Jan;103(1):55-61. X-2, X-3.
368. Carrillo A, Gershbein A, Glassberg KI, et al. Serum inhibin B levels and the response to gonadotropin stimulation test in pubertal boys with varicocele. *J Urol.* 1999 Sep;162(3 Pt 1):875-7. X-2, X-3.

369. Carruthers M. The paradox dividing testosterone deficiency symptoms and androgen assays: A closer look at the cellular and molecular mechanisms of androgen action. *Journal of Sexual Medicine*. 2008 Apr;5 (4):998-1012. X-1, X-2, X-3.
370. Caruso AP, Walsh RA, Wolach JW, et al. Single scrotal incision orchiopexy for the palpable undescended testicle. *J Urol*. 2000 Jul;164(1):156-8; discussion 158-9. X-4, X-5, X-6.
371. Carver BS, Shayegan B, Eggener S, et al. Incidence of metastatic nonseminomatous germ cell tumor outside the boundaries of a modified postchemotherapy retroperitoneal lymph node dissection. *J Clin Oncol*. 2007 Oct 1;25(28):4365-9. X-2, X-3.
372. Casalino DD and Kim R. Clinical importance of a unilateral striated pattern seen on sonography of the testicle. *AJR Am J Roentgenol*. 2002 Apr;178(4):927-30. X-2, X-3.
373. Casals T, Bassas L, Egozcue S, et al. Heterogeneity for mutations in the CFTR gene and clinical correlations in patients with congenital absence of the vas deferens. *Hum Reprod*. 2000 Jul;15(7):1476-83. X-2, X-3.
374. Casey RG, Aktar M, Hegarty P, et al. A prospective 10 year audit of a single Irish centre's experience of retroperitoneal lymph node dissection for metastatic testis cancer. *Surgeon*. 2008 Oct;6(5):294-6. X-2, X-3.
375. Cass AS, Cass BP and Veeraraghavan K. Immediate exploration of the unilateral acute scrotum in young male subjects. *J Urol*. 1980 Dec;124(6):829-32. X-2, X-3.
376. Cass AS, Ferrara L, Wolpert J, et al. Bilateral testicular injury from external trauma. *J Urol*. 1988 Dec;140(6):1435-6. X-2, X-3.
377. Cass AS and Luxenberg M. Testicular injuries. *Urology*. 1991 Jun;37(6):528-30. X-2, X-3.
378. Cassidy SB and Driscoll DJ. Prader-Willi syndrome. *European Journal of Human Genetics*. 2009;17 (1):3-13. X-1, X-2, X-3.
379. Cassio A, Cacciari E, D'Errico A, et al. Incidence of intratubular germ cell neoplasia in androgen insensitivity syndrome. *Acta Endocrinol (Copenh)*. 1990 Oct;123(4):416-22. X-2, X-3.
380. Castro-Magana M, Angulo M and Uy J. Elevated serum estradiol associated with increased androstenedione-testosterone ratio in adolescent males with varicocele and gynecomastia. *Fertil Steril*. 1991 Sep;56(3):515-8. X-2, X-3.
381. Castro-Nallar E, Bacallao K, Parada-Bustamante A, et al. Androgen receptor gene CAG and GGN repeat polymorphisms in Chilean men with primary severe spermatogenic failure. *J Androl*. 2010 Nov-Dec;31(6):552-9. X-2, X-3.
382. Cattolica EV, Karol JB, Rankin KN, et al. High testicular salvage rate in torsion of the spermatic cord. *J Urol*. 1982 Jul;128(1):66-8. X-2, X-3.
383. Caucci M, Barbatelli G and Cinti S. The retractile testis can be a cause of adult infertility. *Fertil Steril*. 1997 Dec;68(6):1051-8. X-2, X-3.
384. Cavicchia JC, Sacerdote FL and Ortiz L. The human blood-testis barrier in impaired spermatogenesis. *Ultrastruct Pathol*. 1996 May-Jun;20(3):211-8. X-2, X-3.
385. Cavusoglu YH, Karaman A, Karaman I, et al. Acute scrotum -- etiology and management. *Indian J Pediatr*. 2005 Mar;72(3):201-3. X-2, X-3.
386. Cayan S, Akbay E, Bozlu M, et al. The effect of varicocele repair on testicular volume in children and adolescents with varicocele. *J Urol*. 2002 Aug;168(2):731-4. X-2, X-3.
387. Cayan S, Akbay E, Bozlu M, et al. Diagnosis of pediatric varicoceles by physical examination and ultrasonography and measurement of the testicular volume: using the prader orchidometer versus ultrasonography. *Urol Int*. 2002;69(4):293-6. X-2, X-3.
388. Cayan S, Erdemir F, Ozbey I, et al. Can varicocelectomy significantly change the way couples use assisted reproductive technologies? *Journal of Urology*. 2002;167 (4 I):1749-1752. X-2, X-3.
389. Celayir AC, Sander S and Elicevik M. Timing of surgery in perineal ectopic testes: analysis of 16 cases. *Pediatr Surg Int*. 2001 Mar;17(2-3):167-8. X-2, X-3.
390. Celebi I, Tekgul S, Ozen HA, et al. Sequential bilateral germ cell tumours of the testis. *Int Urol Nephrol*. 1995;27(2):183-7. X-2, X-3.
391. Celen MK, Ulug M, Ayaz C, et al. Brucellar epididymo-orchitis in southeastern part of Turkey: An 8 year experience. *Brazilian Journal of Infectious Diseases*. 2010 Jan. /;14 (1):109-115. X-2, X-3.
392. Celik AS, Memmi N, Celebi F, et al. Impact of slit and nonslit mesh technique on testicular perfusion and volume in the early and late postoperative period of the totally extraperitoneal preperitoneal technique in patients with inguinal hernia. *Am J Surg*. 2009 Aug;198(2):287-91. X-2, X-3.
393. Celiktas M, Aikimbaev K, Aridogan IA, et al. The effect of retroperitoneal fat tissue thickness on testicular venous drainage. *Urol Int*. 2009;83(1):92-7. X-2, X-3.
394. Cendron M, Schned AR and Ellsworth PI. Histological evaluation of the testicular nubbin in the vanishing testis syndrome. *J Urol*. 1998 Sep;160(3 Pt 2):1161-2; discussion 1163. X-2, X-3.
395. Cespedes RD, Caballero RL, Peretsman SJ, et al. Cryptic presentations of germ cell tumors. *J Am Coll Surg*. 1994 Mar;178(3):261-5. X-2, X-3.
396. Ceuppens H, Derom F and Anne T. Two-stage orchiopexy. *Acta Chir Belg*. 1981 Jul-Aug;80(4):205-11. X-4, X-5, X-6.

397. Chakraborty J, Hikim AP and Jhunjhunwala JS. Quantitative evaluation of testicular biopsies from men with unilateral torsion of spermatic cord. *Urology*. 1985 Feb;25(2):145-50. X-2, X-3.
398. Chakraborty J, Sinha Hikim AP and Jhunjhunwala JS. Stagnation of blood in the microvasculature of the affected and contralateral testes of men with short-term torsion of the spermatic cord. *J Androl*. 1985 Sep-Oct;6(5):291-9. X-2, X-3.
399. Chan KL and Tam PKH. Technical refinements in laparoscopic repair of childhood inguinal hernias. *Surgical Endoscopy*. 2004 Jun;18 (6):957-960. X-2, X-3.
400. Chan KW and Ma LT. Eosinophilic granular cells in a cryptorchid testis. *Arch Pathol Lab Med*. 1987 Sep;111(9):877-9. X-2, X-3.
401. Chan PT, Wright EJ and Goldstein M. Incidence and postoperative outcomes of accidental ligation of the testicular artery during microsurgical varicocelectomy. *J Urol*. 2005 Feb;173(2):482-4. X-2, X-3.
402. Chan YM, de Guillebon A, Lang-Muritano M, et al. GNRH1 mutations in patients with idiopathic hypogonadotropic hypogonadism. *Proc Natl Acad Sci U S A*. 2009 Jul 14;106(28):11703-8. X-2, X-3.
403. Chatzidarellis E, Makrilia N, Giza L, et al. Effects of taxane-based chemotherapy on inhibin B and gonadotropins as biomarkers of spermatogenesis. *Fertil Steril*. 2010 Jul;94(2):558-63. X-2, X-3.
404. Che M, Tamboli P, Ro JY, et al. Bilateral testicular germ cell tumors: twenty-year experience at M. D. Anderson Cancer Center. *Cancer*. 2002 Sep 15;95(6):1228-33. X-2, X-3.
405. Chen C. Varicocele in male factor infertility: role of laparoscopic varicocelectomy. *Int Surg*. 2006 Sep-Oct;91(5 Suppl):S90-4. X-2, X-3.
406. Chen CP, Wang W, Lin SP, et al. Perinatal findings in a male fetus with congenital megacystis and anorectal malformations. *Fetal Diagn Ther*. 1998 Nov-Dec;13(6):348-51. X-2, X-3.
407. Chen KL, Wu HC, Chen YW, et al. International Journal of Urology. [Conference Abstract]. 2010 August;Conference: 10th Asian Congress of Urology of the Urological Association of Asia Taipei Taiwan (Republic of China). Conference Start: 20100827 Conference End: 20100831. Conference: 10th Asian Congress of Urology of the Urological Association of Asia Taipei Taiwan (Republic of China). Conference Start: 20100827 Conference End: 20100831. Conference Publication: (var.pagings). 17:A337. X-2, X-3.
408. Chen P and John S. Ultrasound of the acute scrotum. *Applied Radiology*. 2006 Mar;35 (3):8-17. X-1, X-2, X-3.
409. Chertin B, Koulikov D, Alberton J, et al. The use of laparoscopy in intersex patients. *Pediatr Surg Int*. 2006 May;22(5):405-8. X-2, X-3.
410. Chew G and Hutson JM. Incidence of cryptorchidism and ascending testes in trisomy 21: a 10 year retrospective review. *Pediatr Surg Int*. 2004 Oct;20(10):744-7. X-2, X-3.
411. Chia SE. Endocrine disruptors and male reproductive function--a short review. *Int J Androl*. 2000;23 Suppl 2:45-6. X-1, X-2, X-3.
412. Chiba K, Ishikawa T, Yamaguchi K, et al. The efficacy of adult orchidopexy as a treatment of male infertility: our experience of 20 cases. *Fertil Steril*. 2009 Oct;92(4):1337-9. X-2, X-3.
413. Chilvers C, Pike MC, Forman D, et al. Apparent doubling of frequency of undescended testis in England and Wales in 1962-81. *Lancet*. 1984 Aug 11;2(8398):330-2. X-3.
414. Chin T, Liu C and Wei C. The morphology of the contralateral internal inguinal rings is age-dependent in children with unilateral inguinal hernia. *J Pediatr Surg*. 1995 Dec;30(12):1663-5. X-2, X-3.
415. Chinnaswamy P, Malladi V, Jani KV, et al. Laparoscopic inguinal hernia repair in children. *JSLs*. 2005 Oct-Dec;9(4):393-8. X-2, X-3.
416. Cho HY, Lee BH, Choi HJ, et al. Renal manifestations of Dent disease and Lowe syndrome. *Pediatr Nephrol*. 2008 Feb;23(2):243-9. X-2, X-3.
417. Choi H, Kim KM, Koh SK, et al. A survey of externally recognizable genitourinary anomalies in Korean newborns. *Korean Urological Association. J Korean Med Sci*. 1989 Mar;4(1):13-21. X-2, X-3.
418. Chou YH, Tsau YK, Lin KH, et al. Malignant urinary tract tumor in childhood. *J Formos Med Assoc*. 1991 Nov;90(11):1113-8. X-2, X-3.
419. Chowbey PK, Garg N, Sharma A, et al. Prospective randomized clinical trial comparing lightweight mesh and heavyweight polypropylene mesh in endoscopic totally extraperitoneal groin hernia repair. *Surg Endosc*. 2010 Dec;24(12):3073-9. X-2, X-3.
420. Chowdhary ND, Besina S, Kadri SM, et al. Prepubertal testicular tumours in Kashmir--a histopathological report of 15 cases. *J Indian Med Assoc*. 2004 Nov;102(11):620-2. X-2, X-3.
421. Chowdhary ND and Khan AR. Bilateral tumors of the testis. *JK Practitioner*. 1997;4 (4):292-294. X-2, X-3.
422. Chowdhary SK, Lander AD, Buick RG, et al. The primary management of testicular maldescent in gastroschisis. *Pediatr Surg Int*. 2001 Jul;17(5-6):359-60. X-2, X-3.
423. Choyke PL, Glenn GM, Wagner JP, et al. Epididymal cystadenomas in von Hippel-Lindau disease. *Urology*. 1997 Jun;49(6):926-31. X-2, X-3.
424. Christensen JD and Dogra VS. The Undescended Testis. *Seminars in Ultrasound, CT and MRI*. 2007 Aug;28 (4):307-316. X-1, X-2, X-3.
425. Christensen TB, Daugaard G, Geertsen PF, et al. Effect of chemotherapy on carcinoma in situ of the testis. *Ann Oncol*. 1998 Jun;9(6):657-60. X-2, X-3.

426. Christiansen P and Skakkebaek NE. Pulsatile gonadotropin-releasing hormone treatment of men with idiopathic hypogonadotropic hypogonadism. *Horm Res.* 2002;57(1-2):32-6. X-2, X-3.
427. Chu CC, Chou CY, Hsu TM, et al. Intraoperative laparoscopy in unilateral hernia repair to detect a contralateral patent processus vaginalis. *Pediatric Surgery International.* 1993;8 (5):385-388. X-2, X-3.
428. Chung JJ, Kim MJ, Lee T, et al. Sonographic findings in tuberculous epididymitis and epididymo-orchitis. *J Clin Ultrasound.* 1997 Sep;25(7):390-4. X-2, X-3.
429. Ciftci AO, Bingol-Kologlu M, Senocak ME, et al. Testicular tumors in children. *J Pediatr Surg.* 2001 Dec;36(12):1796-801. X-2, X-3.
430. Cil B, Peynircioglu B, Canyigit M, et al. Peripheral vascular applications of the Amplatzer vascular plug. *Diagn Interv Radiol.* 2008 Mar;14(1):35-9. X-2, X-3.
431. Ciovirnache M, Florea I, Popa M, et al. Morphotypic aspects in the cryptorchid child. *Endocrinologie.* 1987 Jan-Mar;25(1):45-53. X-3.
432. Claahsen-van der Grinten HL, Otten BJ, Hermus AR, et al. Testicular adrenal rest tumors in patients with congenital adrenal hyperplasia can cause severe testicular damage. *Fertil Steril.* 2008 Mar;89(3):597-601. X-2, X-3.
433. Claahsen-van der Grinten HL, Otten BJ, Sweep FC, et al. Testicular tumors in patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency show functional features of adrenocortical tissue. *J Clin Endocrinol Metab.* 2007 Sep;92(9):3674-80. X-2, X-3.
434. Claahsen-van der Grinten HL, Otten BJ, Takahashi S, et al. Testicular adrenal rest tumors in adult males with congenital adrenal hyperplasia: evaluation of pituitary-gonadal function before and after successful testis-sparing surgery in eight patients. *J Clin Endocrinol Metab.* 2007 Feb;92(2):612-5. X-2, X-3.
435. Claahsen-van der Grinten HL, Sweep FC, Blickman JG, et al. Prevalence of testicular adrenal rest tumours in male children with congenital adrenal hyperplasia due to 21-hydroxylase deficiency. *Eur J Endocrinol.* 2007 Sep;157(3):339-44. X-2, X-3.
436. Clarnette TD and Hutson JM. Is the ascending testis actually 'stationary'? Normal elongation of the spermatic cord is prevented by a fibrous remnant of the processus vaginalis. *Pediatr Surg Int.* 1997 Feb;12(2-3):155-7. X-1, X-3.
437. Clarnette TD, Rowe D, Hasthorpe S, et al. Incomplete disappearance of the processus vaginalis as a cause of ascending testis. *J Urol.* 1997 May;157(5):1889-91. X-4, X-5, X-6.
438. Classen J, Dieckmann K, Bamberg M, et al. Radiotherapy with 16 Gy may fail to eradicate testicular intraepithelial neoplasia: preliminary communication of a dose-reduction trial of the German Testicular Cancer Study Group. *Br J Cancer.* 2003 Mar 24;88(6):828-31. X-2, X-3.
439. Classen J, Souchon R, Hehr T, et al. Treatment of early stage testicular seminoma. *Journal of Cancer Research and Clinical Oncology.* 2001;127 (8):475-481. X-2, X-3.
440. Clausen OP, Giwercman A, Jorgensen N, et al. DNA distributions in maldescended testes: hyperdiploid aneuploidy without evidence of germ cell neoplasia. *Cytometry.* 1991;12(1):77-81. X-2, X-3.
441. Clavijo RI, Rose-Nussbaumer J and Turek PJ. Clinically symptomatic vasitis: clinical correlations in a rare condition. *Syst Biol Reprod Med.* 2010 Dec;56(6):445-9. X-2, X-3.
442. Clayman RV, Kavoussi LR and Anderson KR. Laparoscopic urology: past, present, and future. *World J Surg.* 1993 Jan-Feb;17(1):57-62. X-1.
443. Cline KJ, Mata JA, Venable DD, et al. Penetrating trauma to the male external genitalia. *J Trauma.* 1998 Mar;44(3):492-4. X-2, X-3.
444. Cockburn AG, Vugrin D and Batata M. Second primary germ cell tumors in patients with seminoma of the testis. *Journal of Urology.* 1983;130 (2):357-359. X-2, X-3.
445. Codesal J, Nistal M, Queizan A, et al. Number and DNA content of hypertrophic spermatogonia in normal and cryptorchid human testes. *Arch Androl.* 1992 Sep-Oct;29(2):157-62. X-2, X-3.
446. Codesal J, Paniagua R, Queizan A, et al. Cytophotometric DNA quantification in human spermatogonia of cryptorchid testes. *J Urol.* 1993 Feb;149(2):382-5. X-3, X-4, X-5, X-6.
447. Cohen Jr MM and Kreiborg S. Visceral anomalies in the Apert syndrome. *American Journal of Medical Genetics.* 1993;45 (6):758-760. X-2, X-3.
448. Cohen TD, Kay R and Knipper N. Reoperation for cryptorchid testis in prepubertal child. *Urology.* 1993 Oct;42(4):437-9. X-4, X-5, X-6.
449. Cohen Z, Shinhar D, Kurzbart E, et al. Laparoscopic and thoracoscopic surgery in children and adolescents: a 3-year experience. *Pediatr Surg Int.* 1997 Jul;12(5-6):356-9. X-4, X-5, X-6.
450. Colacurci N, Cardone A, De Franciscis P, et al. Laparoscopic hysterectomy in a case of male pseudohermaphroditism with persistent Mullerian duct derivatives. *Hum Reprod.* 1997 Feb;12(2):272-4. X-2, X-3.
451. Colao A, De Rosa M, Sarnacchiaro F, et al. Chronic treatment with CV 205-502 restores the gonadal function in hyperprolactinemic males. *Eur J Endocrinol.* 1996 Nov;135(5):548-52. X-2, X-3.
452. Colleselli K, Poisel S, Schachtner W, et al. Nerve-preserving bilateral retroperitoneal lymphadenectomy: anatomical study and operative approach. *J Urol.* 1990 Aug;144(2 Pt 1):293-7; discussion 297-8. X-2, X-3.

453. Colls BM, Harvey VJ, Skelton L, et al. Bilateral germ cell testicular tumors in New Zealand: experience in Auckland and Christchurch 1978-1994. *J Clin Oncol.* 1996 Jul;14(7):2061-5. X-2, X-3.
454. Colpi GM, Carmignani L, Nerva F, et al. Testicular-sparing microsurgery for suspected testicular masses. *BJU Int.* 2005 Jul;96(1):67-9. X-2, X-3.
455. Colpi GM, Negri L, Scropo FI, et al. Epididymal ultrasonographic findings in case of obstructive pathology. *Acta Chir Hung.* 1994;34(3-4):299-302. X-2, X-3.
456. Comhaire F, Kunnen M and Nahoum C. Radiological anatomy of the internal spermatic vein(s) in 200 retrograde venograms. *Int J Androl.* 1981 Jun;4(3):379-87. X-2, X-3.
457. Comiter CV, Benson CJ, Capelouto CC, et al. Nonpalpable intratesticular masses detected sonographically. *J Urol.* 1995 Oct;154(4):1367-9. X-2, X-3.
458. Connolly SS, D'Arcy FT, Gough N, et al. Carefully selected intratesticular lesions can be safely managed with serial ultrasonography. *BJU Int.* 2006 Nov;98(5):1005-7; discussion 1007. X-2, X-3.
459. Coogan CL, Foster RS, Simmons GR, et al. Bilateral testicular tumors: management and outcome in 21 patients. *Cancer.* 1998 Aug 1;83(3):547-52. X-2, X-3.
460. Cook MB, Graubard BI, Rubertone MV, et al. Perinatal factors and the risk of testicular germ cell tumors. *Int J Cancer.* 2008 Jun 1;122(11):2600-6. X-2, X-3.
461. Cooper K and Govender D. Adenomatous hyperplasia of the rete testis in the undescended testis. *J Pathol.* 1990 Dec;162(4):333-4. X-2, X-3.
462. Coran AG and Polley TZ, Jr. Surgical management of ambiguous genitalia in the infant and child. *J Pediatr Surg.* 1991 Jul;26(7):812-20. X-2, X-3.
463. Cornel EB and Karthaus HF. Manual derotation of the twisted spermatic cord. *BJU Int.* 1999 Apr;83(6):672-4. X-2, X-3.
464. Corner NB, Bissett RJ, Hull JB, et al. Orchidopexy in a military hospital. *J R Army Med Corps.* 1990 Feb;136(1):50-2. X-4, X-5, X-6.
465. Corona G, Petrone L, Fisher AD, et al. Six-month administration of 1% testosterone gel is able to restore erectile function in hypogonadal patients with erectile dysfunction. *Archivio Italiano di Urologia e Andrologia.* 2008 September;80 (3):103-108. X-2, X-3.
466. Corona G, Petrone L, Paggi F, et al. Sexual dysfunction in subjects with Klinefelter's syndrome. *Int J Androl.* 2010 Aug 1;33(4):574-80. X-2, X-3.
467. Corrie D, Mueller EJ and Thompson IM. Management of ultrasonically detected nonpalpable testis masses. *Urology.* 1991;38 (5):429-431. X-3, X-4, X-5, X-6.
468. Cortada X and Kousseff BG. Cryptorchidism in mental retardation. *J Urol.* 1984 Apr;131(4):674-6. X-2, X-3.
469. Cortes D. Cryptorchidism - Aspects of pathogenesis, histology and treatment. *Scandinavian Journal of Urology and Nephrology, Supplement.* 1998;32 (196):1-54. X-3, X-4, X-5, X-6.
470. Cortes D, Brandt B and Thorup J. Direct mixed antiglobulin reaction (MAR) test in semen at follow-up after testicular biopsy of maldescended testes operated in puberty. *Z Kinderchir.* 1990 Aug;45(4):227-8. X-4, X-5, X-6.
471. Cortes D, Kjellberg EM, Breddam M, et al. The true incidence of cryptorchidism in Denmark. *J Urol.* 2008 Jan;179(1):314-8. X-3.
472. Cortes D and Thorup J. Histology of testicular biopsies taken at operation for bilateral maldescended testes in relation to fertility in adulthood. *Br J Urol.* 1991 Sep;68(3):285-91. X-4, X-5, X-6.
473. Cortes D, Thorup J, Hogdall E, et al. The relation of germ cells per tubule in testes, serum inhibin B and FSH in cryptorchid boys. *Pediatr Surg Int.* 2007 Feb;23(2):163-9. X-4, X-5, X-6.
474. Cortes D, Thorup J, Lindenberg S, et al. Infertility despite surgery for cryptorchidism in childhood can be classified by patients with normal or elevated follicle-stimulating hormone and identified at orchidopexy. *BJU Int.* 2003 May;91(7):670-4. X-4, X-5, X-6.
475. Cortes D, Thorup JM and Beck BL. Quantitative histology of germ cells in the undescended testes of human fetuses, neonates and infants. *J Urol.* 1995 Sep;154(3):1188-92. X-2, X-3.
476. Cortes D, Thorup JM, Beck BL, et al. Cryptorchidism as a caudal developmental field defect. A new description of cryptorchidism associated with malformations and dysplasias of the kidneys, the ureters and the spine from T10 to S5. *APMIS.* 1998 Oct;106(10):953-8. X-3.
477. Cortes D, Thorup JM and Lindenberg S. Fertility potential after unilateral orchiopexy: simultaneous testicular biopsy and orchiopexy in a cohort of 87 patients. *J Urol.* 1996 Mar;155(3):1061-5. X-4, X-5, X-6.
478. Cortes D, Thorup JM, Nielsen OH, et al. Cryptorchidism in boys with imperforate anus. *J Pediatr Surg.* 1995 Apr;30(4):631-5. X-3.
479. Cortes D, Thorup JM, Visfeldt J, et al. Is infertility after surgery for cryptorchidism congenital or acquired? *Pediatr Surg Int.* 1998 Nov;14(1-2):6-8. X-2, X-3.
480. Corvin S, Sturm W, Anastasiadis A, et al. Laparoscopic management of the adult nonpalpable testicle. *Urol Int.* 2005;75(4):337-9. X-2.
481. Coskun G, Apaydin M, Sarsilmaz A, et al. Pediatric Radiology. [Conference Abstract]. 2009 June;Conference: European Society of Paediatric Radiology 46th Annual Meeting and 32nd Postgraduate Course Istanbul

- Turkey. Conference Start: 20090531 Conference End: 20090604. Conference: European Society of Paediatric Radiology 46th Annual Meeting and 32nd Postgraduate Course Istanbul Turkey. Conference Start: 20090531 Conference End: 20090604. Conference Publication: (var.pagings). 39:S572. X-2, X-3.
482. Coskun O, Cem Gul H, Mert G, et al. Brucellar epididymo-orchitis: A retrospective study. *Trakya Universitesi Tıp Fakültesi Dergisi*. 2009;26 (3):220-225. X-2, X-3.
 483. Costa WS, Sampaio FJ, Favorito LA, et al. Testicular migration: remodeling of connective tissue and muscle cells in human gubernaculum testis. *J Urol*. 2002 May;167(5):2171-6. X-2, X-3.
 484. Coughlin MT, Bellinger MF and Lee PA. Age at unilateral orchiopexy: effect on hormone levels and sperm count in adulthood. *J Urol*. 1999 Sep;162(3 Pt 2):986-8; discussion 989. X-2, X-3.
 485. Coughlin MT, LaPorte RE, O'Leary LA, et al. How accurate is male recall of reproductive information? *Am J Epidemiol*. 1998 Oct 15;148(8):806-9. X-2, X-3.
 486. Coupland CA, Chilvers CE, Davey G, et al. Risk factors for testicular germ cell tumours by histological tumour type. United Kingdom Testicular Cancer Study Group. *Br J Cancer*. 1999 Aug;80(11):1859-63. X-2, X-3.
 487. Coutts SM, Fulton N and Anderson RA. Environmental toxicant-induced germ cell apoptosis in the human fetal testis. *Hum Reprod*. 2007 Nov;22(11):2912-8. X-2, X-3.
 488. Cox MJ, Coplen DE and Austin PF. The incidence of disorders of sexual differentiation and chromosomal abnormalities of cryptorchidism and hypospadias stratified by meatal location. *J Urol*. 2008 Dec;180(6):2649-52; discussion 2652. X-3, X-4, X-5, X-6.
 489. Cozzi DA, Mele E, Ceccanti S, et al. Infantile abdominoscrotal hydrocele: a not so benign condition. *J Urol*. 2008 Dec;180(6):2611-5; discussion 2615. X-2, X-3.
 490. Craft IL, Khalifa Y, Boulos A, et al. Factors influencing the outcome of in-vitro fertilization with percutaneous aspirated epididymal spermatozoa and intracytoplasmic sperm injection in azoospermic men. *Hum Reprod*. 1995 Jul;10(7):1791-4. X-2, X-3.
 491. Crawford RD. The case for iron repletion as a promoter in testicular cancer. *Medical Hypotheses*. 1998 Aug;51 (2):129-132. X-1, X-2, X-3.
 492. Crellin AM, Hudson BV, Bennett MH, et al. Non-Hodgkin's lymphoma of the testis. *Radiother Oncol*. 1993 May;27(2):99-106. X-2, X-3.
 493. Crino A, Schiaffini R, Ciampalini P, et al. Hypogonadism and pubertal development in Prader-Willi syndrome. *Eur J Pediatr*. 2003 May;162(5):327-33. X-2, X-3.
 494. Crosignani PG and Rubin BL. Optimal use of infertility diagnostic tests and treatments. The ESHRE Capri Workshop Group. *Hum Reprod*. 2000 Mar;15(3):723-32. X-1, X-2, X-3.
 495. Cuevas-Covarrubias SA, Kofman-Alfaro SH, Palencia AB, et al. Accuracy of the clinical diagnosis of recessive X-linked ichthyosis vs ichthyosis vulgaris. *J Dermatol*. 1996 Sep;23(9):594-7. X-3.
 496. Culha M, Mutlu N, Acar O, et al. Comparison of testicular volumes before and after varicocelectomy. *Urol Int*. 1998 Aug;60(4):220-3. X-2, X-3.
 497. Czeizel A, Erodi E and Toth J. An epidemiological study on undescended testis. *J Urol*. 1981 Oct;126(4):524-7. X-3.
 498. Czeizel AE, Kazy Z and Puho E. A population-based case-control teratological study of oral nystatin treatment during pregnancy. *Scandinavian Journal of Infectious Diseases*. 2003;35 (11-12):830-835. X-2, X-3.
 499. Czeizel AE, Kazy Z and Vargha P. A case-control teratological study of vaginal natamycin treatment during pregnancy. *Reproductive Toxicology*. 2003 Jul;17 (4):387-391. X-2, X-3.
 500. Czeizel AE, Kazy Z and Vargha P. A population-based case-control teratological study of vaginal econazole treatment during pregnancy. *European Journal of Obstetrics Gynecology and Reproductive Biology*. 2003 10 Dec;111 (2):135-140. X-2, X-3.
 501. Czeizel AE, Puho E, Bartfai Z, et al. A Possible Association between Oral Aminophylline Treatment during Pregnancy and Skeletal Congenital Abnormalities. *Clinical Drug Investigation*. 2003;23 (12):803-816. X-2, X-3.
 502. Czeizel AE, Rockenbauer M, Sorensen HT, et al. A population-based case-control teratologic study of oral chloramphenicol treatment during pregnancy. *Eur J Epidemiol*. 2000 Apr;16(4):323-7. X-3.
 503. Czeizel AE, Toth M and Rockenbauer M. No teratogenic effect after clotrimazole therapy during pregnancy. *Epidemiology*. 1999 Jul;10(4):437-40. X-3.
 504. Czeizel AE and Vargha P. Case-control study of teratogenic potential of thiethylperazine, an anti-emetic drug. *BJOG: An International Journal of Obstetrics and Gynaecology*. 2003 01 May;110 (5):497-499. X-2, X-3.
 505. Da Conceicao MJ and Coelho L. Caudal anaesthesia with 0.375% ropivacaine or 0.375% bupivacaine in paediatric patients. *Br J Anaesth*. 1998 Apr;80(4):507-8. X-3.
 506. Dada R, Gupta NP and Kucheria K. AZF microdeletions associated with idiopathic and non-idiopathic cases with cryptorchidism and varicocele. *Asian J Androl*. 2002 Dec;4(4):259-63. X-2, X-3.
 507. Dada R, Gupta NP and Kucheria K. Cytogenetic and molecular analysis of male infertility: Y chromosome deletion during nonobstructive azoospermia and severe oligozoospermia. *Cell Biochem Biophys*. 2006;44(1):171-7. X-2, X-3.
 508. Dadfar M, Ahangarpour A, Habiby A, et al. Pre-operative serum level of inhibin B as a predictor of spermatogenesis improvement after varicocelectomy. *Urol J*. 2010 Spring;7(2):110-4. X-2, X-3.

509. Dadfar MR. Orchidopexy for retractile testes in infertile men: a prospective clinical study. *Urol J*. 2007 Summer;4(3):164-8. X-2, X-3.
510. Daehlin L, Tomic R and Damber JE. Depressed testosterone release from testicular tissue in vitro after withdrawal of oestrogen treatment in patients with prostatic carcinoma. *Scand J Urol Nephrol*. 1988;22(1):11-3. X-2, X-3.
511. Daehlin L, Ulstein M, Thorsen T, et al. Follow-up after torsion of the spermatic cord. *Scand J Urol Nephrol Suppl*. 1996;179:139-42. X-2, X-3.
512. Dalmau J, Graus F, Villarejo A, et al. Clinical analysis of anti-Ma2-associated encephalitis. *Brain*. 2004 Aug;127(Pt 8):1831-44. X-2, X-3.
513. Damgaard IN, Jensen TK, Boisen KA, et al. Cryptorchidism and maternal alcohol consumption during pregnancy. *Environmental Health Perspectives*. 2007 Feb;115 (2):272-277. X-3.
514. Damgaard IN, Jensen TK, Petersen JH, et al. Risk factors for congenital cryptorchidism in a prospective birth cohort study. *PLoS One*. 2008;3(8):e3051. X-3.
515. Dan L, Lifang Y and Guangxiu L. Expression and possible functions of a novel gene SPATA12 in human testis. *J Androl*. 2007 Jul-Aug;28(4):502-12. X-2, X-3.
516. Dandapat MC, Padhi NC and Patra AP. Effect of hydrocele on testis and spermatogenesis. *Br J Surg*. 1990 Nov;77(11):1293-4. X-2, X-3.
517. Daniel C, Fizazi K, Culine S, et al. Metachronous gonadal and extragonadal primaries, or late relapse of germ cell tumor? *Urologic Oncology*. 2001;6 (2):49-52. X-2, X-3.
518. Daniels IR and Layer GT. How should gynaecomastia be managed? *ANZ J Surg*. 2003 Apr;73(4):213-6. X-2, X-3.
519. Daniels IR and Layer GT. Testicular tumours presenting as gynaecomastia. *Eur J Surg Oncol*. 2003 Jun;29(5):437-9. X-2, X-3.
520. Danner C and Frick J. Cryptorchidism in adults. *Urol Int*. 1983;38(6):351-3. X-2.
521. Daoud MS, Dahl PR and Su WP. Noonan syndrome. *Semin Dermatol*. 1995 Jun;14(2):140-4. X-1, X-3.
522. Das KM, Prasad K, Szmigielski W, et al. Intratesticular varicocele: evaluation using conventional and Doppler sonography. *AJR Am J Roentgenol*. 1999 Oct;173(4):1079-83. X-2, X-3.
523. Das S and Amar AD. The impact of laparoscopy on modern urologic practice. *Urol Clin North Am*. 1988 Aug;15(3):537-40. X-3.
524. Datta MW, Ulbright TM and Young RH. Renal cell carcinoma metastatic to the testis and its adnexa: A report of five cases including three that accounted for the initial clinical presentation. *International Journal of Surgical Pathology*. 2001;9 (1):49-56. X-2, X-3.
525. Daudin M, Bieth E, Bujan L, et al. Congenital bilateral absence of the vas deferens: clinical characteristics, biological parameters, cystic fibrosis transmembrane conductance regulator gene mutations, and implications for genetic counseling. *Fertil Steril*. 2000 Dec;74(6):1164-74. X-2, X-3.
526. Daugaard G, Giwercman A and Skakkebaek NE. Should the other testis be biopsied? *Seminars in Urologic Oncology*. 1996;14 (1):8-12. X-1, X-2, X-3.
527. Daugaard G, Karas V and Sommer P. Inguinal metastases from testicular cancer. *BJU Int*. 2006 Apr;97(4):724-6. X-2, X-3.
528. Daugaard G, Rorth M, von der Maase H, et al. Management of extragonadal germ-cell tumors and the significance of bilateral testicular biopsies. *Ann Oncol*. 1992 Apr;3(4):283-9. X-2, X-3.
529. Davey RB. Undescended testes: early versus late maldescent. *Pediatr Surg Int*. 1997 Feb;12(2-3):165-7. X-4, X-5, X-6.
530. Davidson S, Brish M, Zer A, et al. Plasma testosterone and beta HCG levels in the first twenty-four hours of life in neonates with cryptorchidism. *Eur J Pediatr*. 1981 Mar;136(1):87-9. X-3.
531. Davies MC, Liao LM, Wilcox DT, et al. Anorectal malformations: What happens in adulthood? *BJU International*. 2010 August;106 (3):398-404. X-3.
532. Davies N, Wheeler RA, Griffiths DM, et al. Opsite skin closure in day case paediatric surgery: is a subcuticular suture necessary? *J R Coll Surg Edinb*. 1995 Dec;40(6):386-7. X-3, X-4, X-5, X-6.
533. Dawson C. Testicular cancer: seek advice early. *J Fam Health Care*. 2002;12(1):3. X-1, X-2, X-3.
534. Day R, Beckett B, Donnai D, et al. A clinical and genetic study of the Say/Barber/Biesecker/Young-Simpson type of Ohdo syndrome. *Clinical Genetics*. 2008;74 (5):434-444. X-3.
535. de Arruda HO, Paula AAP, Suarez R, et al. Can selective retroperitoneal lymphadenectomy be better than unilateral retroperitoneal lymphadenectomy? *International Braz J Urol*. 2003 Sep;29 (5):412-417. X-2, X-3.
536. de Bruin MJ, Oosterhof GO and Debruyne FM. Nerve-sparing retroperitoneal lymphadenectomy for low stage testicular cancer. *Br J Urol*. 1993 Mar;71(3):336-9. X-2, X-3.
537. De Bruin MJFM, Oosterhof GON and Debruyne FMJ. Nerve sparing retroperitoneal lymphadenectomy in low stage non-seminomatous germ celltumors of the testis. *Acta Chirurgica Austriaca*. 1993;25 (1):29-31. X-2, X-3.
538. de Gouveia Brazao CA, Pierik FH, Oosterhuis JW, et al. Bilateral testicular microlithiasis predicts the presence of the precursor of testicular germ cell tumors in subfertile men. *J Urol*. 2004 Jan;171(1):158-60. X-2, X-3.
539. De Grazia E, Gattuccio F, Fatta G, et al. Epididymo-testicular anomalies in the undescended testis. How important is their effect on infertility? *Acta Eur Fertil*. 1982 Mar;13(1):1-17. X-3.

540. de Lima GR, da Silveira RA, de Cerqueira JB, et al. Single-incision multiport laparoscopic orchidopexy: initial report. *J Pediatr Surg*. 2009 Oct;44(10):2054-6. X-4, X-5, X-6.
541. De Miguel MP, Marino JM, Gonzalez-Peramato P, et al. Epididymal growth and differentiation are altered in human cryptorchidism. *J Androl*. 2001 Mar-Apr;22(2):212-25. X-3.
542. De Miguel MP, Regadera J, Martinez-Garcia F, et al. Oncostatin M in the normal human testis and several testicular disorders. *J Clin Endocrinol Metab*. 1999 Feb;84(2):768-74. X-3.
543. De Muinck Keizer-Schrama SM, Hazebroek FW, Drop SL, et al. Hormonal evaluation of boys born with undescended testes during their first year of life. *J Clin Endocrinol Metab*. 1988 Jan;66(1):159-64. X-3.
544. De Rosa M, Lupoli G, Mennitti M, et al. Congenital bilateral anorchia: clinical, hormonal and imaging study in 12 cases. *Andrologia*. 1996 Sep-Oct;28(5):281-5. X-2, X-3.
545. De Schepper J, Verlinde F, Cortvrindt R, et al. Serum inhibin B in normal term-born male and female neonates during the first week of life. *Eur J Pediatr*. 2000 Jun;159(6):465-9. X-2, X-3.
546. de Vries BB, White SM, Knight SJ, et al. Clinical studies on submicroscopic subtelomeric rearrangements: a checklist. *J Med Genet*. 2001 Mar;38(3):145-50. X-3.
547. Dean A, Macleod D, Smith L, et al. *International Journal of Andrology*. [Conference Abstract]. 2010 October;Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference Publication: (var.pagings). 33:39. X-2, X-3.
548. Decastro GJ, Shabsigh A, Poon SA, et al. Adolescent varicocelelectomy--is the potential for catch-up growth related to age and/or Tanner stage? *J Urol*. 2009 Jan;181(1):322-7; discussion 327. X-2, X-3.
549. DeCou JM and Gauderer MW. Inguinal hernia in infants with very low birth weight. *Semin Pediatr Surg*. 2000 May;9(2):84-7. X-3.
550. Dede M, Pabuccu R, Yagci G, et al. Extragonadal yolk sac tumor in pelvic localization. a case report and literature review. *Gynecologic Oncology*. 2004 Mar;92 (3):989-991. X-2, X-3.
551. Del Vecchio MT, Epistolato MC, Tripodi SA, et al. Intratubular germ cell neoplasia of unclassified type. *Analytical and Quantitative Cytology and Histology*. 2006 Jun;28 (3):157-170. X-1, X-2, X-3.
552. Dellicour S, Hall S, Chandramohan D, et al. The safety of artemisinins during pregnancy: A pressing question. *Malaria Journal*. 2007;6(15). X-1, X-2, X-3.
553. Denamur E, Bocquet N, Baudouin V, et al. WT1 splice-site mutations are rarely associated with primary steroid-resistant focal and segmental glomerulosclerosis. *Kidney Int*. 2000 May;57(5):1868-72. X-2, X-3.
554. DePalma L, Carter D and Weiss RM. Epididymal and vas deferens immaturity in cryptorchidism. *J Urol*. 1988 Nov;140(5 Pt 2):1194-6. X-3, X-4, X-5, X-6.
555. Depue RH. Cryptorchidism, and epidemiologic study with emphasis on the relationship to central nervous system dysfunction. *Teratology*. 1988 Apr;37(4):301-5. X-3.
556. Depue RH, Pike MC and Henderson BE. Estrogen exposure during gestation and risk of testicular cancer. *J Natl Cancer Inst*. 1983 Dec;71(6):1151-5. X-2, X-3.
557. Desai CS, Prabhu RY and Supe AN. Laparoscopic orchidectomy for undescended testis in adults. *J Postgrad Med*. 2002 Jan-Mar;48(1):25-6. X-4, X-5, X-6.
558. Dessanti A, Falchetti D, Iannuccelli M, et al. Cryptorchidism with short spermatic vessels: staged orchiopexy preserving spermatic vessels. *J Urol*. 2009 Sep;182(3):1163-7. X-4, X-5, X-6.
559. Dessens AB, Cohen-Kettenis PT, Mellenbergh GJ, et al. Association of prenatal phenobarbital and phenytoin exposure with genital anomalies and menstrual disorders. *Teratology*. 2001 Oct;64(4):181-8. X-2, X-3.
560. Dewan PA. Paediatric surgery in Cambodia. *Med J Aust*. 1995 Dec 4-18;163(11-12):640-2. X-3.
561. Di Tonno F, Tavolini IM, Belmonte P, et al. Lessons from 52 patients with leydig cell tumor of the testis: the GUONE (North-Eastern Uro-Oncological Group, Italy) experience. *Urol Int*. 2009;82(2):152-7. X-2, X-3.
562. Diamond DA and Caldamone AA. The value of laparoscopy for 106 impalpable testes relative to clinical presentation. *J Urol*. 1992 Aug;148(2 Pt 2):632-4. X-4, X-5, X-6.
563. Diamond DA, Caldamone AA and Elder JS. Prevalence of the vanishing testis in boys with a unilateral impalpable testis: is the side of presentation significant? *J Urol*. 1994 Aug;152(2 Pt 1):502-3. X-3.
564. Diamond DA, Zurawski D, Bauer SB, et al. Relationship of varicocele grade and testicular hypotrophy to semen parameters in adolescents. *J Urol*. 2007 Oct;178(4 Pt 2):1584-8. X-2, X-3.
565. Diav-Citrin O, Shechtman S, Bar-Oz B, et al. Pregnancy outcome after in utero exposure to valproate: Evidence of dose relationship in teratogenic effect. *CNS Drugs*. 2008;22 (4):325-334. X-2, X-3.
566. Dieckmann KP, Besserer A and Loy V. Low-dose radiation therapy for testicular intraepithelial neoplasia. *J Cancer Res Clin Oncol*. 1993;119(6):355-9. X-2, X-3.
567. Dieckmann KP, Boeckmann W and Brosig W. Bilateral testicular germ cell tumors: Report of nine cases and review of the literature. *Cancer*. 1986;57 (6):1254-1258. X-3.
568. Dieckmann KP, Boeckmann W, Brosig W, et al. Bilateral testicular germ cell tumors. Report of nine cases and review of the literature. *Cancer*. 1986 Mar 15;57(6):1254-8. X-2, X-3.
569. Dieckmann KP, Heinemann V, Frey U, et al. How harmful is contralateral testicular biopsy? - An analysis of serial imaging studies and a prospective evaluation of surgical complications. *European Urology*. 2005 Oct;48 (4):662-672. X-2, X-3.

570. Dieckmann KP, Linke J, Pichlmeier U, et al. Spermatogenesis in the contralateral testis of patients with testicular germ cell cancer: histological evaluation of testicular biopsies and a comparison with healthy males. *BJU Int.* 2007 May;99(5):1079-85. X-2, X-3.
571. Dieckmann KP and Loy V. Management of contralateral testicular intraepithelial neoplasia in patients with testicular germ-cell tumor. *World J Urol.* 1994;12(3):131-5. X-2, X-3.
572. Dieckmann KP and Loy V. Intratesticular effects of cisplatin-based chemotherapy. *Eur Urol.* 1995;28(1):25-30. X-2, X-3.
573. Dieckmann KP and Loy V. Prevalence of contralateral testicular intraepithelial neoplasia in patients with testicular germ cell neoplasms. *J Clin Oncol.* 1996 Dec;14(12):3126-32. X-2, X-3.
574. Dieckmann KP and Loy V. The value of the biopsy of the contralateral testis in patients with testicular germ cell cancer: the recent German experience. *APMIS.* 1998 Jan;106(1):13-20; discussion 20-3. X-2, X-3.
575. Dieckmann KP, Loy V and Buttner P. Prevalence of bilateral testicular germ cell tumours and early detection based on contralateral testicular intra-epithelial neoplasia. *Br J Urol.* 1993 Mar;71(3):340-5. X-2, X-3.
576. Diez Garcia R, Banuelos A, Marin C, et al. Penoscrotal transposition. *Eur J Pediatr Surg.* 1995 Aug;5(4):222-5. X-2, X-3.
577. Dilek ON, Yucel A, Akbulut G, et al. Are there adverse effects of herniorrhaphy techniques on testicular perfusion? Evaluation by color Doppler ultrasonography. *Urol Int.* 2005;75(2):167-9. X-2, X-3.
578. Diniz G, Barutcuoglu M, Unalp A, et al. Evaluation of the relationship between urogenital abnormalities and neuromuscular disorders. *Eastern Journal of Medicine.* 2008;13 (1-2):19-24. X-2, X-3.
579. Dissanevate P, Warne GL and Zacharin MR. Clinical evaluation in isolated hypogonadotropic hypogonadism (Kallmann syndrome). *J Pediatr Endocrinol Metab.* 1998 Sep-Oct;11(5):631-8. X-2, X-3.
580. Djahangirian O, Ouimet A and Saint-Vil D. Timing and surgical management of neonatal testicular torsions. *J Pediatr Surg.* 2010 May;45(5):1012-5. X-2, X-3.
581. Docimo SG, Moore RG, Adams J, et al. Laparoscopic orchiopexy for the high palpable undescended testis: preliminary experience. *J Urol.* 1995 Oct;154(4):1513-5. X-4, X-5, X-6.
582. Dohle GR, Ramos L, Pieters MH, et al. Surgical sperm retrieval and intracytoplasmic sperm injection as treatment of obstructive azoospermia. *Hum Reprod.* 1998 Mar;13(3):620-3. X-2, X-3.
583. Dohle GR, van Rooijen JH, Pierik FH, et al. Subtotal obstruction of the male reproductive tract. *Urol Res.* 2003 Mar;31(1):22-4. X-2, X-3.
584. Dohle GR, Veeze HJ, Overbeek SE, et al. The complex relationships between cystic fibrosis and congenital bilateral absence of the vas deferens: Clinical, electrophysiological and genetic data. *Human Reproduction.* 1999;14 (2):371-374. X-2, X-3.
585. Doig CM. Use of laparoscopy in children with impalpable testes. *Int J Androl.* 1989 Dec;12(6):420-2. X-4, X-5, X-6.
586. Dominguez C, Martinez Verduch M, Estornell F, et al. Histological study in contralateral testis of prepubertal children following unilateral testicular torsion. *Eur Urol.* 1994;26(2):160-3. X-2, X-3.
587. Domini R, Lima M and Domini M. Microvascular autotransplantation of the testis: the "refluo" technique. *Eur J Pediatr Surg.* 1997 Oct;7(5):288-91. X-3, X-4, X-5, X-6.
588. Donaldson KM, Tong SY and Hutson JM. Prevalence of late orchidopexy is consistent with some undescended testes being acquired. *Indian J Pediatr.* 1996 Nov-Dec;63(6):725-9. X-4, X-5, X-6.
589. Dondero F, Radicioni A, Gandini L, et al. Immunoglobulins in human seminal plasma. *Andrologia.* 1984 May-Jun;16(3):228-36. X-2, X-3.
590. Donkol RH and Salem T. Paternity after varicocelectomy: preoperative sonographic parameters of success. *J Ultrasound Med.* 2007 May;26(5):593-9. X-2, X-3.
591. Donnell SC, Rickwood AM, Jee LD, et al. Congenital testicular maldescent: significance of the complete hernial sac. *Br J Urol.* 1995 Jun;75(6):702-3. X-4, X-5, X-6.
592. Donohue JP, Rowland RG, Kopecky K, et al. Correlation of computerized tomographic changes and histological findings in 80 patients having radical retroperitoneal lymph node dissection after chemotherapy for testis cancer. *J Urol.* 1987 Jun;137(6):1176-9. X-2, X-3.
593. Doppman JL, Travis WD, Nieman L, et al. Cushing syndrome due to primary pigmented nodular adrenocortical disease: findings at CT and MR imaging. *Radiology.* 1989 Aug;172(2):415-20. X-2, X-3.
594. Doria-Rose VP, Biggs ML and Weiss NS. Subfertility and the risk of testicular germ cell tumors (United States). *Cancer Causes Control.* 2005 Aug;16(6):651-6. X-2, X-3.
595. Draghici I, Draghici L, Popescu M, et al. Exploratory laparoscopy--diagnosis method in pediatric surgery pathology. *J Med Life.* 2009 Jul-Sep;2(3):288-95. X-3.
596. Drinkard CR, Shatin D and Clouse J. Postmarketing surveillance of medications and pregnancy outcomes: clarithromycin and birth malformations. *Pharmacoepidemiol Drug Saf.* 2000 Dec;9(7):549-56. X-3.
597. Drop SL, Odink RJ, Rouwe C, et al. The effect of treatment with an LH-RH agonist (Buserelin) on gonadal activity growth and bone maturation in children with central precocious puberty. *Eur J Pediatr.* 1987 May;146(3):272-8. X-2, X-3.

598. Duman L, Demirci M and Tanyel FC. Heart rate variability analysis reveals a shift in autonomic balance towards an increase in parasympathetic tonus in boys with undescended testis. *Eur J Pediatr Surg.* 2010 May;20(3):150-2. X-3.
599. Dunkel L, Hirvonen V and Erkkila K. Clinical aspects of male germ cell apoptosis during testis development and spermatogenesis. *Cell Death and Differentiation.* 1997 Apr;4 (3):171-179. X-1, X-2, X-3.
600. Dunkel L, Perheentupa J and Apter D. Kinetics of the steroidogenic response to single versus repeated doses of human chorionic gonadotropin in boys in prepuberty and early puberty. *Pediatr Res.* 1985 Jan;19(1):1-4. X-3.
601. Dunkel L, Perheentupa J, Tapanainen J, et al. Hypergonadotropic hypogonadism in newborn males with primary testicular failure. *Acta Paediatr Scand.* 1984 Nov;73(6):740-4. X-3.
602. Dunkel L, Taskinen S, Hovatta O, et al. Germ cell apoptosis after treatment of cryptorchidism with human chorionic gonadotropin is associated with impaired reproductive function in the adult. *J Clin Invest.* 1997 Nov 1;100(9):2341-6. X-2, X-3.
603. Dunn WK, McMillan PJ, Sokal M, et al. The value of repeated chest radiographs in the follow-up of patients with germ cell testicular tumours. *Br J Radiol.* 1991 Dec;64(768):1109-12. X-2, X-3.
604. Dursun A, Ermis B, Numanoglu V, et al. Bilateral multicystic renal dysplasia with potter sequence. A case with penile agenesis. *Saudi Med J.* 2006 Nov;27(11):1745-7. X-2, X-3.
605. Dusek L, Abrahamova J, Lakomy R, et al. Multivariate analysis of risk factors for testicular cancer: a hospital-based case-control study in the Czech Republic. *Neoplasma.* 2008;55(4):356-68. X-2, X-3.
606. Dutt N, Bates AW and Baithun SI. Secondary neoplasms of the male genital tract with different patterns of involvement in adults and children. *Histopathology.* 2000 Oct;37(4):323-31. X-2, X-3.
607. Dutta S and Albanese C. Transcutaneous laparoscopic hernia repair in children: a prospective review of 275 hernia repairs with minimum 2-year follow-up. *Surg Endosc.* 2009 Jan;23(1):103-7. X-2, X-3.
608. Duvie SO. Histological changes in the testis following adult orchidopexy for unilateral cryptorchidism. *Arch Androl.* 1984;12(2-3):231-4. X-2.
609. Eardley I, Saw KC and Whitaker RH. Surgical outcome of orchidopexy. II. Trapped and ascending testes. *Br J Urol.* 1994 Feb;73(2):204-6. X-4, X-5, X-6.
610. Eaton SH, Cendron MA, Estrada CR, et al. Intermittent testicular torsion: diagnostic features and management outcomes. *J Urol.* 2005 Oct;174(4 Pt 2):1532-5; discussion 1535. X-2, X-3.
611. Ebert AK, Bals-Pratsch M, Seifert B, et al. Genital and reproductive function in males after functional reconstruction of the exstrophy-epispadias complex--long-term results. *Urology.* 2008 Sep;72(3):566-9; discussion 569-70. X-2, X-3.
612. Eddy AA and Mauer SM. Pseudohermaphroditism, glomerulopathy and Wilms tumor (Drash syndrome): Frequency in end-stage renal failure. *Journal of Pediatrics.* 1985;106 (4):584-587. X-2, X-3.
613. Edey AJ and Sidhu PS. Male infertility: Role of imaging in the diagnosis and management. *Imaging.* 2008;20 (2):139-146. X-3.
614. Eggener SE, Lotan Y and Cheng EY. Magnetic resonance angiography for the nonpalpable testis: A cost and cancer risk analysis. *Journal of Urology.* 2005 May;173 (5):1745-1749. X-1.
615. Ehrlich RM, Lesavoy MA and Fine RN. Total abdominal wall reconstruction in the prune belly syndrome. *J Urol.* 1986 Jul;136(1 Pt 2):282-5. X-3.
616. Ehrlich Y, Konichezky M, Yossepowitch O, et al. Multifocality in testicular germ cell tumors. *J Urol.* 2009 Mar;181(3):1114-9; discussion 1119-20. X-2, X-3.
617. Ehrlich Y, Yossepowitch O, Kedar D, et al. Distribution of nodal metastases after chemotherapy in nonseminomatous testis cancer: a possible indication for limited dissection. *BJU Int.* 2006 Jun;97(6):1221-4. X-2, X-3.
618. Eifler JB, Jr., King P and Schlegel PN. Incidental testicular lesions found during infertility evaluation are usually benign and may be managed conservatively. *J Urol.* 2008 Jul;180(1):261-4; discussion 265. X-2, X-3.
619. Eigenmann J, Bandhauer K and Tomamichel G. Seminal carnitine concentration in obstructive azoospermia. *Eur Urol.* 1994;26(2):134-6. X-2, X-3.
620. Eijsbouts SW, de Muinck Keizer-Schrama SM and Hazebroek FW. Further evidence for spontaneous descent of acquired undescended testes. *J Urol.* 2007 Oct;178(4 Pt 2):1726-9. X-3, X-4, X-5, X-6.
621. Eil C, Crawford JD, Donahoe PK, et al. Fibroblast androgen receptors in patients with genitourinary anomalies. *J Androl.* 1984 Sep-Oct;5(5):313-20. X-2, X-3.
622. Ein SH, Njere I and Ein A. Six thousand three hundred sixty-one pediatric inguinal hernias: a 35-year review. *J Pediatr Surg.* 2006 May;41(5):980-6. X-2, X-3.
623. Ein SH, Shandling B, Wesson D, et al. Esophageal atresia with distal tracheoesophageal fistula: associated anomalies and prognosis in the 1980s. *J Pediatr Surg.* 1989 Oct;24(10):1055-9. X-2, X-3.
624. Einstein DM, Paushter DM, Singer AA, et al. Fibrotic lesions of the testicle: sonographic patterns mimicking malignancy. *Urol Radiol.* 1992;14(3):205-10. X-2, X-3.
625. Eisenberger MA, Blumenstein BA, Crawford ED, et al. Bilateral orchiectomy with or without flutamide for metastatic prostate cancer. *N Engl J Med.* 1998 Oct 8;339(15):1036-42. X-2, X-3.

626. Ekeh AP, Walusimbi M, Brigham E, et al. The Prevalence of Incidental Findings on Abdominal Computed Tomography Scans of Trauma Patients. *Journal of Emergency Medicine*. 2010 May;38 (4):484-489. X-2, X-3.
627. Ekenze SO, Ikechukwu RN and Oparaocha DC. Surgically correctable congenital anomalies: prospective analysis of management problems and outcome in a developing country. *J Trop Pediatr*. 2006 Apr;52(2):126-31. X-3, X-4, X-5, X-6.
628. Eklund A, Rudberg C, Smedberg S, et al. Short-term results of a randomized clinical trial comparing Lichtenstein open repair with totally extraperitoneal laparoscopic inguinal hernia repair. *British Journal of Surgery*. 2006 September;93 (9):1060-1068. X-2, X-3.
629. El Gohary MA. Non-descent of the testis: An overlooked laparoscopic finding. *J Pediatr Urol*. 2008 Oct;4(5):364-6. X-4, X-5, X-6.
630. El-Bayoumi MA, Hamada TA and El-Mokaddem HH. Male infertility: etiologic factors in 385 consecutive cases. *Andrologia*. 1982 Jul-Aug;14(4):333-9. X-2, X-3.
631. El-Dakhly MR, Tawadrous GA, Mostafa T, et al. Assessment of seminal plasma laminin in fertile and infertile men. *Asian J Androl*. 2007 Jan;9(1):63-7. X-2, X-3.
632. el-Demiry MI, Hargreave TB, Busuttill A, et al. Immunocompetent cells in human testis in health and disease. *Fertil Steril*. 1987 Sep;48(3):470-9. X-2, X-3.
633. Elder JS. Epididymal anomalies associated with hydrocele/hernia and cryptorchidism: implications regarding testicular descent. *J Urol*. 1992 Aug;148(2 Pt 2):624-6. X-3, X-4, X-5, X-6.
634. Elder JS. Two-stage Fowler-Stephens orchiopexy in the management of intra-abdominal testes. *J Urol*. 1992 Oct;148(4):1239-41. X-4, X-5, X-6.
635. Elder JS. Laparoscopy for impalpable testes: significance of the patent processus vaginalis. *J Urol*. 1994 Aug;152(2 Pt 2):776-8. X-4, X-5, X-6.
636. Elder JS, Keating MA and Duckett JW. Infant testicular prostheses. *J Urol*. 1989 Jun;141(6):1413-5. X-2, X-3.
637. Eldrup J and Steven K. Influence of orchidopexy for cryptorchidism on subsequent fertility. *Br J Surg*. 1980 Apr;67(4):269-70. X-3, X-4, X-5, X-6.
638. Elemen L, Sozubir S and Bulut M. An old technique for surgery of 'high' undescended testis revisited. *J Pediatr Urol*. 2008 Oct;4(5):330-2. X-4, X-5, X-6.
639. Elert A, Jahn K, Heidenreich A, et al. Population-based investigation of familial undescended testis and its association with other urogenital anomalies. *Journal of Pediatric Urology*. 2005 Dec;1 (6):403-407. X-3.
640. El-Gohary MA. The role of laparoscopy in the management of impalpable testes. *Pediatr Surg Int*. 1997 Jul;12(5-6):463-5. X-4, X-5, X-6.
641. El-Gohary MA. Laparoscopic management of persistent mullerian duct syndrome. *Pediatric Surgery International*. 2003 Sep;19 (7):533-536. X-4, X-5, X-6.
642. El-Haggar S, El-Ashmawy S, Attia A, et al. Beta-endorphin in serum and seminal plasma in infertile men. *Asian J Androl*. 2006 Nov;8(6):709-12. X-2, X-3.
643. Elliott M, Jones JC, Jones R, et al. An inter-district audit of the school entry medical examination in Cheshire. *Public Health*. 1994 May;108(3):203-10. X-2, X-3.
644. El-Moula MG, Izaki H, El-Anany F, et al. Laparoscopy and intersex: Report of 5 cases of male pseudohermaphroditism. *Journal of Medical Investigation*. 2008 Feb;55 (1-2):147-150. X-4, X-5, X-6.
645. Elsawi MM, Pryor JP, Klufio G, et al. Genital tract function in men with Noonan syndrome. *Journal of Medical Genetics*. 1994 Jun;31 (6):468-470. X-2, X-3.
646. El-Senoussi MA, Bissada NK and El-Akkad S. Epidemiology and clinical characteristics of testicular tumors in Saudi Arabia: King Faisal Specialist Hospital and Research Centre experience. *Journal of Surgical Oncology*. 1987;35 (1):39-41. X-2, X-3.
647. El-Zahaby HM. Is the prolongation of QTc interval in infants during sevoflurane anaesthesia related to the speed of induction or to the duration of exposure? *Egyptian Journal of Anaesthesia*. 2004 Jan;20 (1):53-57. X-2, X-3.
648. Emir H, Ayik B, Elicevik M, et al. Histological evaluation of the testicular nubbins in patients with nonpalpable testis: assessment of etiology and surgical approach. *Pediatr Surg Int*. 2007 Jan;23(1):41-4. X-3.
649. Emond JP and Houle JG. Orchiopexy with a thimble. *J Urol*. 1985 Dec;134(6):1176-8. X-4, X-5, X-6.
650. Endo M, Watanabe T, Nakano M, et al. Laparoscopic completely extraperitoneal repair of inguinal hernia in children: a single-institute experience with 1,257 repairs compared with cut-down herniorrhaphy. *Surg Endosc*. 2009 Aug;23(8):1706-12. X-2, X-3.
651. Engeler DS, Hosli PO, John H, et al. Early orchiopexy: prepubertal intratubular germ cell neoplasia and fertility outcome. *Urology*. 2000 Jul;56(1):144-8. X-4, X-5, X-6.
652. Erk A, Ozeren S, Ozbay O, et al. Persistent mullerian duct syndrome. A case report. *J Reprod Med*. 1999 Feb;44(2):135-8. X-2, X-3.
653. Erpenbach KH. Systemic treatment with interferon-alpha 2B: an effective method to prevent sterility after bilateral mumps orchitis. *J Urol*. 1991 Jul;146(1):54-6. X-2, X-3.
654. Esposito C, Damiano R, Gonzalez Sabin MA, et al. Laparoscopy-assisted orchidopexy: an ideal treatment for children with intra-abdominal testes. *J Endourol*. 2002 Nov;16(9):659-62. X-4, X-5, X-6.

655. Esposito C, Mastroianni L, Gonzalez-Sabin MA, et al. The value and the advantages of videosurgery in the management of pediatric varicoceles. *Italian Journal of Pediatrics*. 2003 Oct;29 (5):354-357. X-2, X-3.
656. Esposito C, Mattioli G, Monguzzi GL, et al. Complications and conversions of pediatric videosurgery: the Italian multicentric experience on 1689 procedures. *Surg Endosc*. 2002 May;16(5):795-8. X-4, X-5, X-6.
657. Esposito C, Monguzzi G, Gonzalez-Sabin MA, et al. Results and complications of laparoscopic surgery for pediatric varicocele. *J Pediatr Surg*. 2001 May;36(5):767-9. X-2, X-3.
658. Esposito C, Monguzzi GL, Gonzalez-Sabin MA, et al. Laparoscopic treatment of pediatric varicocele: a multicenter study of the Italian society of video surgery in infancy. *J Urol*. 2000 Jun;163(6):1944-6. X-2, X-3.
659. Esposito C, Valla JS and Yeung CK. Current indications for laparoscopy and retroperitoneoscopy in pediatric urology. *Surgical Endoscopy*. 2004 Nov;18 (11):1559-1564. X-1, X-2.
660. Esposito C, Vallone G, Savanelli A, et al. Long-term outcome of laparoscopic Fowler-Stephens orchiopexy in boys with intra-abdominal testis. *J Urol*. 2009 Apr;181(4):1851-6. X-4, X-5, X-6.
661. Esposito C, Vallone G, Settimi A, et al. Laparoscopic orchiopexy without division of the spermatic vessels: can it be considered the procedure of choice in cases of intraabdominal testis? *Surg Endosc*. 2000 Jul;14(7):658-60. X-4, X-5, X-6.
662. Esteves SC and Glina S. Recovery of spermatogenesis after microsurgical subinguinal varicocele repair in azoospermic men based on testicular histology. *Int Braz J Urol*. 2005 Nov-Dec;31(6):541-8. X-2, X-3.
663. Evans AE, D'Angio GJ and Snyder H. Selecting initial therapy for pediatric genitourinary cancers. *Cancer*. 1987 Aug 1;60(3 Suppl):480-9. X-1, X-2, X-3.
664. Evenson DP, Klein FA, Whitmore WF, et al. Flow cytometric evaluation of sperm from patients with testicular carcinoma. *J Urol*. 1984 Dec;132(6):1220-5. X-2, X-3.
665. Ezra N, Afari A and Wong J. Pelvic and scrotal trauma: CT and triage of patients. *Abdominal Imaging*. 2009 July;34 (4):541-544. X-2, X-3.
666. Facchinetti F, Bracci R and Sardelli S. Possible testicular 3beta-hydroxysteroid dehydrogenase deficiency in cryptorchid neonates. *Archives of Andrology*. 1983;10 (3):253-259. X-3.
667. Fagerli J, Schneck FX, Lee PA, et al. Absence of microdeletions in the Y chromosome in patients with a history of cryptorchidism and azoospermia or oligospermia. *Fertil Steril*. 1999 Apr;71(4):697-700. X-2, X-3.
668. Fahlenkamp D, Rassweiler J, Fornara P, et al. Complications of laparoscopic procedures in urology: experience with 2,407 procedures at 4 German centers. *J Urol*. 1999 Sep;162(3 Pt 1):765-70; discussion 770-1. X-4, X-5, X-6.
669. Fahlenkamp D, Winfield HN, Schonberger B, et al. Role of laparoscopic surgery in pediatric urology. *Eur Urol*. 1997;32(1):75-84. X-4, X-5, X-6.
670. Fakhry J, Khoury A and Barakat K. The hypoechoic band: a normal finding on testicular sonography. *AJR Am J Roentgenol*. 1989 Aug;153(2):321-3. X-2, X-3.
671. Fallat ME, Skoog SJ, Belman AB, et al. The prune belly syndrome: a comprehensive approach to management. *J Urol*. 1989 Sep;142(3):802-5. X-4, X-5, X-6.
672. Fallon B, Welton M and Hawtrey C. Congenital anomalies associated with cryptorchidism. *J Urol*. 1982 Jan;127(1):91-3. X-3, X-4, X-5, X-6.
673. Farkas I and Szollosi J. Relationships between serum FSH level and the size of testis in azoospermic patients. *Int Urol Nephrol*. 1986;18(2):175-9. X-2, X-3.
674. Farooq O and Bashir ur R. Recurrent inguinal hernia repair by open preperitoneal approach. *J Coll Physicians Surg Pak*. 2005 May;15(5):261-5. X-2, X-3.
675. Farr SA, Littlefield JL, Fletcher JW, et al. Testicular circulatory isolation in man: comparison of radionuclide angiography with Doppler evaluation. *J Surg Oncol*. 1993 Sep;54(1):57-9. X-2, X-3.
676. Favorito LA, Cavalcante AG and Babinski MA. Study on the incidence of testicular and epididymal appendages in patients with cryptorchidism. *Int Braz J Urol*. 2004 Jan-Feb;30(1):49-52. X-3.
677. Favorito LA, Cavalcante AL and Babinski MA. Study of the incidence of testicular and epididymal appendages in patients with cryptorchidism. *International Braz J Urol*. 2004 Jan;30 (1):49-52. X-3.
678. Favorito LA, Costa WS and Sampaio FJ. Relationship between the persistence of the processus vaginalis and age in patients with cryptorchidism. *Int Braz J Urol*. 2005 Jan-Feb;31(1):57-61. X-3.
679. Favorito LA, Hidalgo A, Jr., Pazos HM, et al. Stereological and morphometric analysis of collagen and seminiferous tubules in testes of patients with cryptorchidism submitted or not to treatment with human chorionic gonadotrophin. *Int Braz J Urol*. 2005 Nov-Dec;31(6):562-6; discussion 567-8. X-3.
680. Favorito LA, Klojda CA and Sampaio FJ. Congenital absence of the testis in human fetuses and in cryptorchid patients. *Int J Urol*. 2004 Dec;11(12):1110-3. X-3.
681. Favorito LA, Klojda CAB, Costa WS, et al. Is there a relationship with anomalous insertions of the distal gubernaculum testis and testicular ectopia? Analysis in human fetuses and patients with cryptorchidism. *Journal of Urology*. 2003 01 Aug;170 (2 I):554-557. X-2, X-3.
682. Favorito LA, Sampaio FJ, Javaroni V, et al. Proximal insertion of gubernaculum testis in normal human fetuses and in boys with cryptorchidism. *J Urol*. 2000 Sep;164(3 Pt 1):792-4. X-3.
683. Feber KM and Kass EJ. Varicocelectomy in adolescent boys: long-term experience with the Palomo procedure. *J Urol*. 2008 Oct;180(4 Suppl):1657-9; discussion 1659-60. X-2, X-3.

684. Fedder J, Cruger D, Oestergaard B, et al. Etiology of azoospermia in 100 consecutive nonvasectomized men. *Fertil Steril*. 2004 Nov;82(5):1463-5. X-2, X-3.
685. Feitz WFJ and De Vries JDM. Pediatric urology and the daily medical practice: Way apart? *European Urology*. 1995;28 (2):158-160. X-2, X-3.
686. Feng S, Bogatcheva NV, Truong A, et al. Developmental expression and gene regulation of insulin-like 3 receptor RXFP2 in mouse male reproductive organs. *Biol Reprod*. 2007 Oct;77(4):671-80. X-2, X-3.
687. Fenichel P, Bstandig B, Roger C, et al. Unilateral testicular tumour associated to congenital adrenal hyperplasia: Failure of specific tumoral molecular markers to discriminate between adrenal rest and leydigioma. *Ann Endocrinol (Paris)*. 2008 Nov;69(5):453-8. X-2, X-3.
688. Fenig DM, Snyder HM, 3rd, Wu HY, et al. The histopathology of iatrogenic cryptorchid testis: an insight into etiology. *J Urol*. 2001 Apr;165(4):1258-61. X-3.
689. Ferlin A, Bogatcheva NV, Giancesello L, et al. Insulin-like factor 3 gene mutations in testicular dysgenesis syndrome: clinical and functional characterization. *Mol Hum Reprod*. 2006 Jun;12(6):401-6. X-3.
690. Ferlin A and Foresta C. Insulin-like factor 3: a novel circulating hormone of testicular origin in humans. *Ann N Y Acad Sci*. 2005 May;1041:497-505. X-2, X-3.
691. Ferlin A, Garolla A, Bettella A, et al. Androgen receptor gene CAG and GGC repeat lengths in cryptorchidism. *European Journal of Endocrinology*. 2005 Mar;152 (3):419-425. X-2.
692. Ferlin A, Pepe A, Giancesello L, et al. New roles for INSL3 in adults. *Ann N Y Acad Sci*. 2009 Apr;1160:215-8. X-2, X-3.
693. Ferlin A, Simonato M, Bartoloni L, et al. The INSL3-LGR8/GREAT ligand-receptor pair in human cryptorchidism. *J Clin Endocrinol Metab*. 2003 Sep;88(9):4273-9. X-3.
694. Ferlin A, Zuccarello D, Garolla A, et al. Mutations in INSL3 and RXFP2 genes in cryptorchid boys. *Ann N Y Acad Sci*. 2009 Apr;1160:213-4. X-3.
695. Fernandez MF, Olmos B, Granada A, et al. Human exposure to endocrine-disrupting chemicals and prenatal risk factors for cryptorchidism and hypospadias: a nested case-control study. *Environ Health Perspect*. 2007 Dec;115 Suppl 1:8-14. X-3.
696. Ferrara P, Rossodivita A, Ruggiero A, et al. Cryptorchidism associated with meningomyelocele. *J Paediatr Child Health*. 1998 Feb;34(1):44-6. X-3.
697. Ferreira U, Netto Junior NR, Esteves SC, et al. Comparative study of the fertility potential of men with only one testis. *Scand J Urol Nephrol*. 1991;25(4):255-9. X-3.
698. Ferrer FA, Cadeddu JA, Schulam P, et al. Orchiopexy using 2 mm. laparoscopic instruments: 2 techniques for delivering the testis into the scrotum. *J Urol*. 2000 Jul;164(1):160-1. X-4, X-5, X-6.
699. Ferro F, Caterino S and Lais A. Testicular prosthesis in children: a simplified insertion technique. *Eur Urol*. 1991;19(3):230-2. X-2, X-3.
700. Ficarra V, Caleffi G, Mofferdin A, et al. Penetrating trauma to the scrotum and the corpora cavernosa caused by gunshot. *Urologia Internationalis*. 1999 Sep;62 (3):192-194. X-2, X-3.
701. Fideleff H, Boquete H, Saskyn N, et al. Pubertal varicocele: correlation between clinical, Doppler, and hormonal findings. *Fertil Steril*. 1993 Mar;59(3):693-5. X-2, X-3.
702. Fideleff HL, Boquete HR, Suarez MG, et al. Controversies in the evolution of paediatric-adolescent varicocele: clinical, biochemical and histological studies. *Eur J Endocrinol*. 2000 Dec;143(6):775-81. X-2, X-3.
703. Filippi G, Pecile V, Rinaldi A, et al. Fragile-X mutation and Klinefelter syndrome: a reappraisal. *Am J Med Genet*. 1988 May-Jun;30(1-2):99-107. X-2, X-3.
704. Fillion C, Malassine A, Tahri-Joutei A, et al. Immunoreactive arginine vasopressin in the testis: Immunocytochemical localization and testicular content in normal and in experimental cryptorchid mouse. *Biology of Reproduction*. 1993;48 (4):786-792. X-2, X-3.
705. Finkel DM, Phillips JL and Snyder PJ. Stimulation of spermatogenesis by gonadotropins in men with hypogonadotropic hypogonadism. *N Engl J Med*. 1985 Sep 12;313(11):651-5. X-2, X-3.
706. Fiorelli C, Daniele G, Meliani E, et al. Surgical correction of failed orchiopexy in non pediatric age. *Acta Urologica Italica*. 1999;13 (1):23-25. X-4, X-5, X-6.
707. Fisch H, Hyun G and Hensle TW. Testicular growth and gonadotrophin response associated with varicocele repair in adolescent males. *BJU Int*. 2003 Jan;91(1):75-8. X-2, X-3.
708. Fisher JS, Macpherson S, Marchetti N, et al. Human 'testicular dysgenesis syndrome': a possible model using in-utero exposure of the rat to dibutyl phthalate. *Hum Reprod*. 2003 Jul;18(7):1383-94. X-2, X-3.
709. Flati G, Porowska B, Flati D, et al. Improvement in the fertility rate after placement of microsurgical shunts in men with recurrent varicocele. *Fertil Steril*. 2004 Dec;82(6):1527-31. X-2, X-3.
710. Fogdestam I, Fall M and Nilsson S. Microsurgical epididymovasostomy in the treatment of occlusive azoospermia. *Fertil Steril*. 1986 Nov;46(5):925-9. X-2, X-3.
711. Fonger JD, Filler RM, Rider WD, et al. Testicular tumours in maldescended testes. *Can J Surg*. 1981 Jul;24(4):353-5. X-2, X-3.
712. Fonzo D, Manenti M, Varengo M, et al. Andrological and hormonal findings in subjects with ductus deferens agenesis. *Andrologia*. 1983;15 Spec No:614-8. X-2, X-3.

713. Foppiani L, Bernasconi D, Del Monte P, et al. Leydig cell tumour-induced bilateral gynaecomastia in a young man: endocrine abnormalities. *Andrologia*. 2005 Feb;37(1):36-9. X-2, X-3.
714. Foppiani L, Cavani S, Piredda S, et al. Lack of evidence of a genetic origin in the impaired spermatogenesis of a patient cohort with low-grade varicocele. *J Endocrinol Invest*. 2001 Apr;24(4):217-23. X-2, X-3.
715. Ford TF, Parkinson MC and Pryor JP. The undescended testis in adult life. *Br J Urol*. 1985 Apr;57(2):181-4. X-2, X-3.
716. Foresta C, Bettella A, Ferlin A, et al. Evidence for a stimulatory role of follicle-stimulating hormone on the spermatogonial population in adult males. *Fertil Steril*. 1998 Apr;69(4):636-42. X-2, X-3.
717. Foresta C, Bettella A, Merico M, et al. Use of recombinant human follicle-stimulating hormone in the treatment of male factor infertility. *Fertil Steril*. 2002 Feb;77(2):238-44. X-2, X-3.
718. Foresta C, Bettella A, Rossato M, et al. Inhibin B plasma concentrations in oligozoospermic subjects before and after therapy with follicle stimulating hormone. *Hum Reprod*. 1999 Apr;14(4):906-12. X-2, X-3.
719. Foresta C, Bettella A, Vinanzi C, et al. A novel circulating hormone of testis origin in humans. *J Clin Endocrinol Metab*. 2004 Dec;89(12):5952-8. X-2, X-3.
720. Foresta C, De Carlo E, Mioni R, et al. Sperm nuclear chromatin heterogeneity in infertile subjects. *Andrologia*. 1989 Jul-Aug;21(4):384-90. X-2, X-3.
721. Foresta C and Ferlin A. Role of INSL3 and LGR8 in cryptorchidism and testicular functions. *Reprod Biomed Online*. 2004 Sep;9(3):294-8. X-2, X-3.
722. Foresta C, Ferlin A, Garolla A, et al. High frequency of well-defined Y-chromosome deletions in idiopathic Sertoli cell-only syndrome. *Hum Reprod*. 1998 Feb;13(2):302-7. X-2, X-3.
723. Foresta C, Garolla A, Bettella A, et al. Doppler ultrasound of the testis in azoospermic subjects as a parameter of testicular function. *Hum Reprod*. 1998 Nov;13(11):3090-3. X-2, X-3.
724. Foresta C, Indino M, Mioni R, et al. Evidence of sperm nuclear chromatin heterogeneity in ex-cryptorchid subjects. *Andrologia*. 1987 Mar-Apr;19(2):148-52. X-2, X-3.
725. Foresta C, Moro E, Garolla A, et al. Y chromosome microdeletions in cryptorchidism and idiopathic infertility. *J Clin Endocrinol Metab*. 1999 Oct;84(10):3660-5. X-3.
726. Foresta C and Varotto A. Assessment of testicular cytology by fine needle aspiration as a diagnostic parameter in the evaluation of the oligospermic subject. *Fertil Steril*. 1992 Nov;58(5):1028-33. X-2, X-3.
727. Foresta C and Varotto A. Immunocytochemical localization of epidermal growth factor receptors in human testis from infertile subjects. *Fertil Steril*. 1994 May;61(5):941-8. X-2, X-3.
728. Foresta C, Varotto A and Scandellari C. Assessment of testicular cytology by fine needle aspiration as a diagnostic parameter in the evaluation of the azoospermic subject. *Fertil Steril*. 1992 Apr;57(4):858-65. X-2, X-3.
729. Foresta C, Zorzi M, Rossato M, et al. Sperm nuclear instability and staining with aniline blue: abnormal persistence of histones in spermatozoa in infertile men. *Int J Androl*. 1992 Aug;15(4):330-7. X-2, X-3.
730. Formanek A, Rusnak B, Zollkofer C, et al. Embolization of the spermatic vein for treatment of infertility: a new approach. *Radiology*. 1981 May;139(2):315-21. X-2, X-3.
731. Fornara P, Doehn C, Seyfarth M, et al. Why is urological laparoscopy minimally invasive? *Eur Urol*. 2000 Mar;37(3):241-50. X-2, X-3.
732. Forsberg L, Dale L, Hoiem L, et al. Computed tomography in early stages of testicular carcinoma. Size of normal retroperitoneal lymph nodes and lymph nodes in patients with metastases in stage II A. A SWENOTECA study: Swedish-Norwegian Testicular Cancer Project. *Acta Radiol Diagn (Stockh)*. 1986 Sep-Oct;27(5):569-74. X-2, X-3.
733. Forti G, Facchinetti F, Sardelli S, et al. Spermatic and peripheral venous plasma concentrations of progesterone, 17 alpha-hydroxyprogesterone, and 20 alpha-dihydroprogesterone in prepubertal boys. *J Clin Endocrinol Metab*. 1983 Apr;56(4):831-4. X-3, X-4, X-5, X-6.
734. Forti G, Facchinetti F, Sardelli S, et al. Spermatic and peripheral venous plasma concentrations of dehydroepiandrosterone sulfate in prepubertal and pubertal boys. *J Steroid Biochem*. 1983 Jan;18(1):29-32. X-3, X-4, X-5, X-6.
735. Fossa SD, Aabyholm T, Vespestad S, et al. Semen quality after treatment for testicular cancer. *Eur Urol*. 1993;23(1):172-6. X-2, X-3.
736. Fossa SD, Aass N, Heilo A, et al. Testicular carcinoma in situ in patients with extragonadal germ-cell tumours: the clinical role of pretreatment biopsy. *Ann Oncol*. 2003 Sep;14(9):1412-8. X-2, X-3.
737. Fossa SD, Chen J, Schonfeld SJ, et al. Risk of contralateral testicular cancer: a population-based study of 29,515 U.S. men. *J Natl Cancer Inst*. 2005 Jul 20;97(14):1056-66. X-2, X-3.
738. Fossa SD, Klepp O, Ous S, et al. Unilateral retroperitoneal lymph node dissection in patients with non-seminomatous testicular tumor in clinical stage I. *Eur Urol*. 1984;10(1):17-23. X-2, X-3.
739. Fossa SD, Opjordsmoen S and Haug E. Androgen replacement and quality of life in patients treated for bilateral testicular cancer. *Eur J Cancer*. 1999 Aug;35(8):1220-5. X-2, X-3.
740. Fossa SD, Ous S, Aabyholm T, et al. Post-treatment fertility in patients with testicular cancer. I. Influence of retroperitoneal lymph node dissection on ejaculatory potency. *Br J Urol*. 1985 Apr;57(2):204-9. X-2, X-3.

741. Fossa SD, Ous S, Stenwig AE, et al. Distribution of retroperitoneal lymph node metastases in patients with non-seminomatous testicular cancer in clinical stage I. *Eur Urol.* 1990;17(2):107-12. X-2, X-3.
742. Fossa SD, Silde J, Theodorsen L, et al. Pre-treatment DNA ploidy of sperm cells as a predictive parameter of post-treatment spermatogenesis in patients with testicular cancer. *Br J Urol.* 1994 Sep;74(3):359-65. X-2, X-3.
743. Foster CM, Feuillan P, Padmanabhan V, et al. Ovarian function in girls with McCune-Albright syndrome. *Pediatr Res.* 1986 Sep;20(9):859-63. X-2, X-3.
744. Foster RS, Donohue JP and Bihrlie R. Stage A nonseminomatous testis carcinoma: rationale and results of nerve-sparing retroperitoneal lymphadenectomy. *Urol Int.* 1991;46(3):294-7. X-2, X-3.
745. Fowler JE, Jr., Platoff GE, Kubrock CA, et al. Commercial radioimmunoassay for beta subunit of human chorionic gonadotropin: falsely positive determinations due to elevated serum luteinizing hormone. *Cancer.* 1982 Jan 1;49(1):136-9. X-2, X-3.
746. Fraietta R, Spaine DM, Bertolla RP, et al. Individual and seminal characteristics of patients with testicular germ cell tumors. *Fertil Steril.* 2010 Nov;94(6):2107-12. X-2, X-3.
747. Fram RJ, Garnick MB and Retik A. The spectrum of genitourinary abnormalities in patients with cryptorchidism, with emphasis on testicular carcinoma. *Cancer.* 1982 Nov 15;50(10):2243-6. X-3.
748. Franca MM, Jorge AA, Carvalho LR, et al. Novel heterozygous nonsense GLI2 mutations in patients with hypopituitarism and ectopic posterior pituitary lobe without holoprosencephaly. *J Clin Endocrinol Metab.* 2010 Nov;95(11):E384-91. X-2, X-3.
749. Franc-Guimond J, Kryger J and Gonzalez R. Experience with the Bailez technique for laparoscopic access in children. *J Urol.* 2003 Sep;170(3):936-8. X-4, X-5, X-6.
750. Franco I, Kogan S, Fisher J, et al. Genitourinary malformations associated with agenesis of the corpus callosum. *J Urol.* 1993 May;149(5):1119-21. X-2, X-3.
751. Franneby U, Sandblom G, Nyren O, et al. Self-reported adverse events after groin hernia repair, a study based on a national register. *Value Health.* 2008 Sep-Oct;11(5):927-32. X-2, X-3.
752. Frates MC, Benson CB, DiSalvo DN, et al. Solid extratesticular masses evaluated with sonography: pathologic correlation. *Radiology.* 1997 Jul;204(1):43-6. X-2, X-3.
753. Freiha FS, Shortliffe LD, Rouse RV, et al. The extent of surgery after chemotherapy for advanced germ cell tumors. *J Urol.* 1984 Nov;132(5):915-7. X-2, X-3.
754. Freund I, Zenzes MT, Muller RP, et al. Testicular function in eight patients with seminoma after unilateral orchidectomy and radiotherapy. *Int J Androl.* 1987 Apr;10(2):447-55. X-2, X-3.
755. Frey P and Bianchi A. Microvascular orchiopexy. *Eur J Pediatr.* 1987;146 Suppl 2:S51-2. X-3, X-4, X-5, X-6.
756. Frey P and Bianchi A. Microvascular autotransplantation of intra-abdominal testes. *Prog Pediatr Surg.* 1989;23:115-25. X-3, X-4, X-5, X-6.
757. Friedman RM. The role of the testicles in male psychological development. *Journal of the American Psychoanalytic Association.* 1996;44 (1):201-253. X-1, X-2, X-3.
758. Friedman RM, Lopez FJ, Tucker JA, et al. Fertility after cryptorchidism: a comparative analysis of early orchidopexy with and without concomitant hormonal therapy in the young male rat. *J Urol.* 1994 Jan;151(1):227-33. X-2, X-3.
759. Frydelund-Larsen L, Krausz C, Leffers H, et al. Inhibin B: a marker for the functional state of the seminiferous epithelium in patients with azoospermia factor C microdeletions. *J Clin Endocrinol Metab.* 2002 Dec;87(12):5618-24. X-2, X-3.
760. Fuchs E, Hatch T and Seifert A. Extragonadal germ cell tumor: The preoperative urological evaluation. *Journal of Urology.* 1987;137 (5):993-995. X-2, X-3.
761. Fujisawa M, Yamazaki I, Dobashi M, et al. Serum inhibin pro alphaC in infertile men. *Arch Androl.* 2001 Nov-Dec;47(3):191-4. X-2, X-3.
762. Fuller AF, Jr., Budzik GP, Krane IM, et al. Mullerian inhibiting substance inhibition of a human endometrial carcinoma cell line xenografted in nude mice. *Gynecol Oncol.* 1984 Jan;17(1):124-32. X-2, X-3.
763. Funke S, Flach E, Kiss I, et al. Male reproductive tract abnormalities: more common after assisted reproduction? *Early Hum Dev.* 2010 Sep;86(9):547-50. X-3.
764. Furman WL, Fontanesi J, Hustu O, et al. Testicular relapse in children with acute nonlymphoblastic leukemia. *Cancer.* 1990;66 (10):2095-2098. X-2, X-3.
765. Galan JJ, Guarducci E, Nuti F, et al. Molecular analysis of estrogen receptor alpha gene AGATA haplotype and SNP12 in European populations: potential protective effect for cryptorchidism and lack of association with male infertility. *Hum Reprod.* 2007 Feb;22(2):444-9. X-2, X-3.
766. Gallagher RP, Huchcroft S, Phillips N, et al. Physical activity, medical history, and risk of testicular cancer (Alberta and British Columbia, Canada). *Cancer Causes Control.* 1995 Sep;6(5):398-406. X-2, X-3.
767. Galvin DJ and Bredin H. The role of laparoscopy in the management of the impalpable testicle. *Ir J Med Sci.* 2002 Apr-Jun;171(2):73-5. X-4, X-5, X-6.
768. Ganem JP, Workman KR and Shaban SF. Testicular microlithiasis is associated with testicular pathology. *Urology.* 1999 Jan;53 (1):209-213. X-2, X-3.
769. Garcia-Gonzalez R, Pinto J and Val-Bernal JF. Testicular metastases from solid tumors: an autopsy study. *Ann Diagn Pathol.* 2000 Apr;4(2):59-64. X-2, X-3.

770. Garcia-Rodriguez J, Garcia-Martin M, Nogueras-Ocana M, et al. Exposure to pesticides and cryptorchidism: geographical evidence of a possible association. *Environ Health Perspect.* 1996 Oct;104(10):1090-5. X-3, X-4, X-5, X-6.
771. Garel L, Dubois J, Azzie G, et al. Preoperative manual detorsion of the spermatic cord with Doppler ultrasound monitoring in patients with intravaginal acute testicular torsion. *Pediatr Radiol.* 2000 Jan;30(1):41-4. X-2, X-3.
772. Garibyan H. Use of laparoscopy for the localization of impalpable testes. *Neth J Surg.* 1987 Apr;39(2):68-71. X-4, X-5, X-6.
773. Garibyan H, Hazebroek FW, Schulkes JA, et al. Microvascular surgical orchiopexy in the treatment of high-lying undescended testes. *Br J Urol.* 1984 Jun;56(3):326-9. X-4, X-5, X-6.
774. Garland SM, Ault KA, Gall SA, et al. Pregnancy and infant outcomes in the clinical trials of a human papillomavirus type 6/11/16/18 vaccine: A combined analysis of five randomized controlled trials. *Obstetrics and Gynecology.* 2009 December;114 (6):1179-1188. X-3.
775. Garlantezec R, Monfort C, Rouget F, et al. Maternal occupational exposure to solvents and congenital malformations: A prospective study in the general population. *Occupational and Environmental Medicine.* 2009 July;66 (7):456-463. X-3.
776. Garolla A, Ferlin A, Vinanzi C, et al. Molecular analysis of the androgen receptor gene in testicular cancer. *Endocr Relat Cancer.* 2005 Sep;12(3):645-55. X-2, X-3.
777. Gat Y, Bachar GN, Everaert K, et al. Induction of spermatogenesis in azoospermic men after internal spermatic vein embolization for the treatment of varicocele. *Hum Reprod.* 2005 Apr;20(4):1013-7. X-2, X-3.
778. Gat Y, Bachar GN, Zukerman Z, et al. Varicocele: a bilateral disease. *Fertil Steril.* 2004 Feb;81(2):424-9. X-2, X-3.
779. Gat Y, Gornish M, Chakraborty J, et al. Azoospermia and maturation arrest: malfunction of valves in erect poster of humans leads to hypoxia in sperm production site. *Andrologia.* 2010 Dec;42(6):389-94. X-2, X-3.
780. Gat Y, Gornish M, Navon U, et al. Right varicocele and hypoxia, crucial factors in male infertility: fluid mechanics analysis of the impaired testicular drainage system. *Reprod Biomed Online.* 2006 Oct;13(4):510-5. X-2, X-3.
781. Gat Y, Gornish M, Perlow A, et al. Azoospermia and Sertoli-cell-only syndrome: hypoxia in the sperm production site due to impairment in venous drainage of male reproductive system. *Andrologia.* 2010 Oct;42(5):314-21. X-2, X-3.
782. Gat Y, Zukerman Z, Chakraborty J, et al. Varicocele, hypoxia and male infertility. Fluid Mechanics analysis of the impaired testicular venous drainage system. *Hum Reprod.* 2005 Sep;20(9):2614-9. X-2, X-3.
783. Gat Y, Zukerman ZV, Bachar GN, et al. Adolescent varicocele: is it a unilateral disease? *Urology.* 2003 Oct;62(4):742-6; discussion 746-7. X-2, X-3.
784. Gatti JM, Kirsch AJ, Troyer WA, et al. Increased incidence of hypospadias in small-for-gestational age infants in a neonatal intensive-care unit. *BJU Int.* 2001 Apr;87(6):548-50. X-2, X-3.
785. Gauderer MW. Gastroschisis and extraabdominal ectopic testis: simultaneous repair. *J Pediatr Surg.* 1987 Jul;22(7):657-9. X-2, X-3.
786. Gaudino R, Cavarzere P, Camilot M, et al. Prepubertal serum inhibin B in cryptorchid infants and in monorchid boys with compensatory testicular hypertrophy. *Fertil Steril.* 2008 Dec;90(6):2217-21. X-3.
787. Gaudio E, Paggiarino D and Carpino F. Structural and ultrastructural modifications of cryptorchid human testes. *J Urol.* 1984 Feb;131(2):292-6. X-3.
788. Gauwitz MD and Zagars GK. Treatment of seminoma arising in cryptorchid testes. *Int J Radiat Oncol Biol Phys.* 1992;24(1):153-9. X-3.
789. Gazzera C, Rampado O, Savio L, et al. Radiological treatment of male varicocele: technical, clinical, seminal and dosimetric aspects. *Radiol Med.* 2006 Apr;111(3):449-58. X-2, X-3.
790. Geczi L, Gomez F, Bak M, et al. The incidence, prognosis, clinical and histological characteristics, treatment, and outcome of patients with bilateral germ cell testicular cancer in Hungary. *J Cancer Res Clin Oncol.* 2003 May;129(5):309-15. X-2, X-3.
791. Geczi L, Gomez F, Horvath Z, et al. Three-year results of the first educational and early detection program for testicular cancer in Hungary. *Oncology.* 2001;60(3):228-34. X-2, X-3.
792. Geiger J, Epelman M and Darge K. The fountain sign: a novel color Doppler sonographic finding for the diagnosis of acute idiopathic scrotal edema. *J Ultrasound Med.* 2010 Aug;29(8):1233-7. X-2, X-3.
793. Gentile DP and Cockett AT. The effect of varicocelectomy on testicular volume in 89 infertile adult males with varicoceles. *Fertil Steril.* 1992 Jul;58(1):209-11. X-2, X-3.
794. Georgiadis E, Papandreou L, Evangelopoulou C, et al. Incidence of gynaecomastia in 954 young males and its relationship to somatometric parameters. *Ann Hum Biol.* 1994 Nov-Dec;21(6):579-87. X-2, X-3.
795. Gerber GS, Bissada NK, Hulbert JC, et al. Laparoscopic retroperitoneal lymphadenectomy: multi-institutional analysis. *J Urol.* 1994 Oct;152(4):1188-91; discussion 1191-2. X-2, X-3.
796. Gerber GS, Rukstalis DB, Levine LA, et al. Current and future roles of laparoscopic surgery in urology. *Urology.* 1993 Jan;41(1 Suppl):5-9. X-1, X-2, X-3.
797. Gerber GS and Stockton BR. Laparoscopy. *Journal of Endourology.* 2005 Oct;19 (8):931-933. X-1, X-2, X-3.

798. Germa-Lluch JR, Garcia del Muro X, Maroto P, et al. Clinical pattern and therapeutic results achieved in 1490 patients with germ-cell tumours of the testis: the experience of the Spanish Germ-Cell Cancer Group (GG). *Eur Urol*. 2002 Dec;42(6):553-62; discussion 562-3. X-2, X-3.
799. Gerscovich EO. High-resolution ultrasonography in the diagnosis of scrotal pathology: I. Normal scrotum and benign disease. *Journal of Clinical Ultrasound*. 1993;21 (6):355-373. X-1.
800. Gershbein AB, Horowitz M and Glassberg KI. The adolescent varicocele I: left testicular hypertrophy following varicocelectomy. *J Urol*. 1999 Oct;162(4):1447-9. X-2, X-3.
801. Gershman ST and Stolley PD. A case-control study of testicular cancer using Connecticut tumour registry data. *International Journal of Epidemiology*. 1988;17 (4):738-742. X-2, X-3.
802. Gervain M and Palmai S. The management of retained testis based on our investigations. *Acta Chir Hung*. 1988;29(2):117-29. X-3, X-4, X-5, X-6.
803. Ghazzal AM. Inguinal hernias and genital abnormalities in young Jordanian males. *East Mediterr Health J*. 2006 May-Jul;12(3-4):483-8. X-2, X-3.
804. Gheri G, Sgambati E, Thyron GD, et al. The oligosaccharidic content of the glycoconjugates of the prepubertal descended and undescended testis: lectin histochemical study. *Ital J Anat Embryol*. 2004 Apr-Jun;109(2):69-84. X-2, X-3.
805. Ghizzoni L, Mastorakos G, Vottero A, et al. Corticotropin-releasing hormone (CRH) inhibits steroid biosynthesis by cultured human granulosa-lutein cells in a CRH and interleukin-1 receptor-mediated fashion. *Endocrinology*. 1997 Nov;138(11):4806-11. X-2, X-3.
806. Giachini C, Nuti F, Marinari E, et al. Partial AZFc deletions in infertile men with cryptorchidism. *Hum Reprod*. 2007 Sep;22(9):2398-403. X-3.
807. Giagulli VA and Vermeulen A. Leydig cell function in infertile men with idiopathic oligospermic infertility. *J Clin Endocrinol Metab*. 1988 Jan;66(1):62-7. X-2, X-3.
808. Giannattasio A, De Rosa M, Smeraglia R, et al. Glutathione peroxidase (GPX) activity in seminal plasma of healthy and infertile males. *Journal of Endocrinological Investigation*. 2002 Dec;25 (11):983-986. X-2, X-3.
809. Gibbons JJ, Parra RO, Andriole GL, et al. Testicular circulatory isolation: a phase I study. *Surg Oncol*. 1992 Dec;1(6):413-6. X-2, X-3.
810. Gidai J, Acs N, Banhidly F, et al. No association found between use of very large doses of diazepam by 112 pregnant women for a suicide attempt and congenital abnormalities in their offspring. *Toxicol Ind Health*. 2008 Feb-Mar;24(1-2):29-39. X-2, X-3.
811. Gililand A, Carlan SJ, Greenbaum LD, et al. Undescended testicle and a meconium-filled hemiscrotum: prenatal ultrasound appearance. *Ultrasound Obstet Gynecol*. 2002 Aug;20(2):200-2. X-3, X-4, X-5, X-6.
812. Gill IS, Ross JH, Sung GT, et al. Needlescopic surgery for cryptorchidism: the initial series. *J Pediatr Surg*. 2000 Oct;35(10):1426-30. X-4, X-5, X-6.
813. Girardin CM, Lemyre E, Alos N, et al. Comparison of adolescents with Klinefelter syndrome according to the circumstances of diagnosis: Amniocentesis versus clinical signs. *Hormone Research*. 2009 August;72 (2):98-105. X-2, X-3.
814. Giseke S, Glass M, Tapadar P, et al. A true laparoscopic herniotomy in children: evaluation of long-term outcome. *J Laparoendosc Adv Surg Tech A*. 2010 Mar;20(2):191-4. X-2, X-3.
815. Giusti G, Beltrami P, Tallarigo C, et al. Unilateral laparoscopic retroperitoneal lymphadenectomy for clinical stage I nonseminomatous testicular cancer. *J Endourol*. 1998 Dec;12(6):561-6. X-2, X-3.
816. Giwercman A, Berthelsen JG, Muller J, et al. Screening for carcinoma-in-situ of the testis. *Int J Androl*. 1987 Feb;10(1):173-80. X-2, X-3.
817. Giwercman A, Thomsen JK, Hertz J, et al. Prevalence of carcinoma in situ of the testis in 207 oligozoospermic men from infertile couples: prospective study of testicular biopsies. *BMJ*. 1997 Oct 18;315(7114):989-91. X-2, X-3.
818. Giwercman A, von der Maase H, Berthelsen JG, et al. Localized irradiation of testes with carcinoma in situ: effects on Leydig cell function and eradication of malignant germ cells in 20 patients. *J Clin Endocrinol Metab*. 1991 Sep;73(3):596-603. X-2, X-3.
819. Glanzmann C, Schultz G and Lutolf UM. Long-term morbidity of adjuvant infradiaphragmatic irradiation in patients with testicular cancer and implications for the treatment of stage I seminoma. *Radiotherapy and Oncology*. 1991;22 (1):12-18. X-2, X-3.
820. Glassow F. Inguinal hernia repair using local anaesthesia. *Ann R Coll Surg Engl*. 1984 Nov;66(6):382-7. X-2, X-3.
821. Glavind K, Lauritsen NR, Klove-Mogensen M, et al. The effect of vasectomy on the production of plasma luteinizing hormone and follicle stimulating hormone in man. *Int Urol Nephrol*. 1990;22(6):553-9. X-2, X-3.
822. Go RS and Gundrum JD. Uncertainty and discordance in the staging and prognosis of diffuse large B-cell lymphoma with isolated bilateral testicular involvement. *American Journal of Hematology*. 2009 November;84 (11):762-763. X-2, X-3.
823. Gokcora IH. Low inguinal groove incision for indirect inguinal hernias in girls: a preliminary report on an incisional proposal. *J Am Coll Surg*. 1996 Oct;183(4):384-6. X-2, X-3.

824. Gokcora IH and Yagmurlu A. A novel incision for groin pathologies in children: the low inguinal groove approach. *Hernia*. 2003 Sep;7(3):146-9. X-4, X-5, X-6.
825. Goldblatt PJ and Gunning WT. Ultrastructure of the interstitial cells of Leydig, stimulated and unstimulated. *Ann Clin Lab Sci*. 1985 Nov-Dec;15(6):441-50. X-2, X-3.
826. Goldstein M and Eid JF. Elevation of intratesticular and scrotal skin surface temperature in men with varicocele. *J Urol*. 1989 Sep;142(3):743-5. X-2, X-3.
827. Goldstein M, Gilbert BR, Dicker AP, et al. Microsurgical inguinal varicocelectomy with delivery of the testis: an artery and lymphatic sparing technique. *J Urol*. 1992 Dec;148(6):1808-11. X-2, X-3.
828. Goldwasser B, Weissenberg R, Lunenfeld B, et al. Semen quality and hormonal status of patients following testicular torsion. *Andrologia*. 1984 May-Jun;16(3):239-43. X-2, X-3.
829. Goluboff ET, Chang DT, Kirsch AJ, et al. Incidence of external spermatic veins in patients undergoing inguinal varicocelectomy. *Urology*. 1994 Dec;44(6):893-6. X-2, X-3.
830. Gomez-Roman JJ, Mayorga M, Mira C, et al. Glandular inclusions in inguinal hernia sacs: a clinicopathological study of six cases. *Pediatr Pathol*. 1994 Nov-Dec;14(6):1043-9. X-2, X-3.
831. Gong Y and Han XD. Effect of nonylphenol on steroidogenesis of rat Leydig cells. *J Environ Sci Health B*. 2006;41(5):705-15. X-2, X-3.
832. Gonzalez Buitrago JM, Miralles JM, Munoz MH, et al. Seminal plasma creatine kinase activity in fertility studies. *Arch Androl*. 1980 Dec;5(4):355-60. X-2, X-3.
833. Gonzalez-Andrade F and Lopez-Pulles R. Congenital malformations in Ecuadorian children: Urgent need to create a National Registry of Birth Defects. *Application of Clinical Genetics*. 2010;3:29-39. X-3.
834. Gordon M, Cervellione RM, Morabito A, et al. 20 years of transcrotal orchidopexy for undescended testis: Results and outcomes. *Journal of Pediatric Urology*. 2010;6 (5):506-512. X-4, X-5, X-6.
835. Gorlov IP, Kamat A, Bogatcheva NV, et al. Mutations of the GREAT gene cause cryptorchidism. *Hum Mol Genet*. 2002 Sep 15;11(19):2309-18. X-3.
836. Gorsler CM and Schier F. Laparoscopic herniorrhaphy in children. *Surg Endosc*. 2003 Apr;17(4):571-3. X-2, X-3.
837. Goto H, Kanematsu A, Yoshimura K, et al. Preoperative diagnosis of congenital segmental giant megaureter presenting as a fetal abdominal mass. *J Pediatr Surg*. 2010 Jan;45(1):269-71. X-2, X-3.
838. Gotoh M, Miyake K and Mitsuya H. Leydig cell hyperplasia in cryptorchid patients: quantitative evaluation of Leydig cells in undescended and contralateral scrotal testes. *Urol Res*. 1984;12(3):159-64. X-2, X-3.
839. Gotoh M, Miyake K and Mitsuya H. Elastic fibers in tunica propria of undescended and contralateral scrotal testes from cryptorchid patients. *Urology*. 1987 Oct;30(4):359-63. X-3.
840. Gotoh M, Miyake K, Mitsuya H, et al. Cytoplasmic inclusion bodies in Leydig cells from the testes of postpubertal cryptorchid patients. *Int J Androl*. 1983 Jun;6(3):221-8. X-3.
841. Goullis DG, Iliadou PK, Tsametis C, et al. Serum anti-Mullerian hormone levels differentiate control from subfertile men but not men with different causes of subfertility. *Gynecol Endocrinol*. 2008 Mar;24(3):158-60. X-2, X-3.
842. Goullis DG, Tsametis C, Iliadou PK, et al. Serum inhibin B and anti-Mullerian hormone are not superior to follicle-stimulating hormone as predictors of the presence of sperm in testicular fine-needle aspiration in men with azoospermia. *Fertil Steril*. 2009 Apr;91(4):1279-84. X-2, X-3.
843. Govaerts L, Monnens L and Tegelaers W. Cerebro-hepato-renal syndrome of Zellweger: Clinical symptoms and relevant laboratory findings in 16 patients. *European Journal of Pediatrics*. 1982;139 (2):125-128. X-2, X-3.
844. Gozdasoglu S, Cavdar AO, Babacan E, et al. Late effects of chemoradiotherapy in pediatric Hodgkin's disease. *J Chemother*. 1995 Oct;7(5):463-6. X-2, X-3.
845. Grady RW, Mitchell ME and Carr MC. Laparoscopic and histologic evaluation of the inguinal vanishing testis. *Urology*. 1998 Nov;52 (5):866-869. X-4, X-5, X-6.
846. Grangeia A, Carvalho F, Fernandes S, et al. A novel missense mutation P1290S at exon-20 of the CFTR gene in a Portuguese patient with congenital bilateral absence of the vas deferens. *Fertility and Sterility*. 2005 Feb;83 (2):448-451. X-2, X-3.
847. Grant CS, Carney JA, Carpenter PC, et al. Primary pigmented nodular adrenocortical disease: diagnosis and management. *Surgery*. 1986 Dec;100(6):1178-84. X-2, X-3.
848. Gray LE, Jr., Ostby J, Furr J, et al. Perinatal exposure to the phthalates DEHP, BBP, and DINP, but not DEP, DMP, or DOTP, alters sexual differentiation of the male rat. *Toxicol Sci*. 2000 Dec;58(2):350-65. X-2, X-3.
849. Green DM, Breslow NE, Beckwith JB, et al. Screening of children with hemihypertrophy, aniridia, and Beckwith-Wiedemann syndrome in patients with Wilms tumor: a report from the National Wilms Tumor Study. *Med Pediatr Oncol*. 1993;21(3):188-92. X-2, X-3.
850. Green NE, Lowery ER and Thomas R. Orthopaedic aspects of prune belly syndrome. *Journal of Pediatric Orthopaedics*. 1993;13 (4):496-501. X-2, X-3.
851. Greene S, Zachmann M, Manella B, et al. Comparison of two tests to recognize or exclude 5 alpha-reductase deficiency in prepubertal children. *Acta Endocrinol (Copenh)*. 1987 Jan;114(1):113-7. X-2, X-3.
852. Greene SA, Frank M, Zachmann M, et al. Growth and sexual development in children with meningomyelocele. *Eur J Pediatr*. 1985 Jul;144(2):146-8. X-2, X-3.

853. Greenfield SP, Seville P and Wan J. Experience with varicoceles in children and young adults. *J Urol*. 2002 Oct;168(4 Pt 2):1684-8; discussion 1688. X-2, X-3.
854. Greenswag LR. Adults with Prader-Willi syndrome: a survey of 232 cases. *Dev Med Child Neurol*. 1987 Apr;29(2):145-52. X-2, X-3.
855. Grigor KM and Giwercman A. Hormones and growth factors in germ cell neoplasia: general discussion. *Eur Urol*. 1993;23(1):89-92. X-1, X-2, X-3.
856. Grigor KM and Rorth M. Should the contralateral testis be biopsied? Round table discussion. *Eur Urol*. 1993;23(1):129-35. X-2, X-3.
857. Grimbizis G, Mikos T, Pantazis K, et al. ThinPrep are superior to conventional smears in the cytological diagnosis of subfertile men by testicular fine-needle aspiration. *Diagnostic Cytopathology*. 2008 Jan;36 (1):1-7. X-2, X-3.
858. Grober ED, O'Brien J, Jarvi KA, et al. Preservation of testicular arteries during subinguinal microsurgical varicolectomy: clinical considerations. *J Androl*. 2004 Sep-Oct;25(5):740-3. X-2, X-3.
859. Grunberger I, Suhrlund MJ, Greco MA, et al. Effects of ultrasound on ultrastructure of human testes. *Urology*. 1987 Sep;30(3):201-2. X-2, X-3.
860. Grundy RG, Pritchard J, Baraitser M, et al. Perlman and Wiedemann-Beckwith syndromes: two distinct conditions associated with Wilms' tumour. *Eur J Pediatr*. 1992 Dec;151(12):895-8. X-2, X-3.
861. Guarino N, Tadini B and Bianchi M. The adolescent varicocele: the crucial role of hormonal tests in selecting patients with testicular dysfunction. *J Pediatr Surg*. 2003 Jan;38(1):120-3; discussion 120-3. X-2, X-3.
862. Guarino N, Tadini B, Camardi P, et al. The incidence of associated urological abnormalities in children with renal ectopia. *J Urol*. 2004 Oct;172(4 Pt 2):1757-9; discussion 1759. X-2, X-3.
863. Guerin JF, Rozycka M, Lenczowski S, et al. Objective evaluation of fibrosis in human testicular biopsies by analysis based on optical diffractometry. *Acta Anat (Basel)*. 1986;125(2):88-92. X-2, X-3.
864. Guerra Junior G, de Mello MP, Assumpcao JG, et al. True hermaphrodites in the southeastern region of Brazil: a different cytogenetic and gonadal profile. *J Pediatr Endocrinol Metab*. 1998 Jul-Aug;11(4):519-24. X-2, X-3.
865. Gul A, Cebeci A, Erol O, et al. Prenatal diagnosis of 13q-syndrome in a fetus with Dandy-Walker malformation. *Obstetrics and Gynecology*. 2005 May;105 (5 II):1227-1229. X-2, X-3.
866. Guminska A, Oszukowska E, Kuzanski W, et al. Less advanced testicular dysgenesis is associated by a higher prevalence of germ cell neoplasia. *Int J Androl*. 2010 Feb;33(1):e153-62. X-2, X-3.
867. Gundy S, Babosa M, Baki M, et al. Increased predisposition to cancer in brothers and offspring of testicular tumor patients. *Pathol Oncol Res*. 2004;10(4):197-203. X-2, X-3.
868. Gunel M, Cavkaytar S, Ceylaner G, et al. Azoospermia and cryptorchidism in a male with a de novo reciprocal t(Y;16) translocation. *Genet Couns*. 2008;19(3):277-80. X-2, X-3.
869. Gupta N, Rajwanshi A, Srinivasan R, et al. Pathology of supraclavicular lymphadenopathy in Chandigarh, north India: an audit of 200 cases diagnosed by needle aspiration. *Cytopathology*. 2006 Apr;17(2):94-6. X-2, X-3.
870. Gurbuz N, Ozbay B, Aras B, et al. Do microdeletions in the AZF region of the Y chromosome accompany cryptorchidism in Turkish children? *International Urology and Nephrology*. 2008 September;40 (3):577-581. X-3.
871. Gurkaynak M, Akyol F, Zorlu F, et al. Stage I testicular seminoma: para-aortic and iliac irradiation with reduced dose after orchiectomy. *Urol Int*. 2003;71(4):385-8. X-2, X-3.
872. Gustafson ML, Lee MM, Asmundson L, et al. Mullerian inhibiting substance in the diagnosis and management of intersex and gonadal abnormalities. *J Pediatr Surg*. 1993 Mar;28(3):439-44. X-3.
873. Gutierrez A, Campos A, Canizares FJ, et al. Anatomical and clinical correlation with histological and histometric patterns in cryptorchism. *Br J Urol*. 1993 Oct;72(4):506-9. X-3.
874. Haas GG, Jr. Antibody-mediated causes of male infertility. *Urol Clin North Am*. 1987 Aug;14(3):539-50. X-2, X-3.
875. Haas RJ, Schmidt P, Gobel U, et al. Treatment of malignant testicular tumors in childhood: results of the German National Study 1982-1992. *Med Pediatr Oncol*. 1994;23(5):400-5. X-2, X-3.
876. Hack WW, Meijer RW, Bos SD, et al. A new clinical classification for undescended testis. *Scand J Urol Nephrol*. 2003;37(1):43-7. X-1, X-2, X-3.
877. Hacker-Kolm U, Kleinhans G and Gohde W. Flow cytometric analysis of the maldescended testis. *Andrologia*. 1985 Jul-Aug;17(4):389-94. X-3.
878. Haddy TB, Sandlund JT and Magrath IT. Testicular involvement in young patients with non-Hodgkin's lymphoma. *Am J Pediatr Hematol Oncol*. 1988 Fall;10(3):224-9. X-2, X-3.
879. Hadjiathanasiou CG, Brauner R, Lortat-Jacob S, et al. True hermaphroditism: genetic variants and clinical management. *J Pediatr*. 1994 Nov;125(5 Pt 1):738-44. X-2, X-3.
880. Hadziselimovic F and Dessouky N. Differences in testicular development between 5alpha-reductase 2 deficiency and isolated bilateral cryptorchidism. *J Urol*. 2008 Sep;180(3):1116-20. X-2, X-3.
881. Hadziselimovic F, Duckett JW, Snyder HM, 3rd, et al. Omphalocele, cryptorchidism, and brain malformations. *J Pediatr Surg*. 1987 Sep;22(9):854-6. X-2, X-3.

882. Hadziselimovic F, Emmons LR and Buser MW. A diminished postnatal surge of Ad spermatogonia in cryptorchid infants is additional evidence for hypogonadotropic hypogonadism. *Swiss Med Wkly.* 2004 Jun 26;134(25-26):381-4. X-3.
883. Hadziselimovic F, Geneto R and Emmons LR. Increased apoptosis in the contralateral testes of patients with testicular torsion as a factor for infertility. *J Urol.* 1998 Sep;160(3 Pt 2):1158-60. X-2, X-3.
884. Hadziselimovic F, Hadziselimovic NO, Demougin P, et al. EGR4 is a master gene responsible for fertility in cryptorchidism. *Sex Dev.* 2009;3(5):253-63. X-3.
885. Hadziselimovic F and Herzog B. The importance of both an early orchidopexy and germ cell maturation for fertility. *Lancet.* 2001 06 Oct;358 (9288):1156-1157. X-3, X-4, X-5, X-6.
886. Hadziselimovic F, Herzog B, Liebundgut B, et al. Testicular and vascular changes in children and adults with varicocele. *J Urol.* 1989 Aug;142(2 Pt 2):583-5; discussion 603-5. X-2, X-3.
887. Hadziselimovic F, Snyder H, Duckett J, et al. Testicular histology in children with unilateral testicular torsion. *J Urol.* 1986 Jul;136(1 Pt 2):208-10. X-2, X-3.
888. Hadziselimovic F, Thommen L, Girard J, et al. The significance of postnatal gonadotropin surge for testicular development in normal and cryptorchid testes. *J Urol.* 1986 Jul;136(1 Pt 2):274-6. X-3.
889. Hafeez S, Sharma RA, Huddart RA, et al. Challenges in Treating Patients with Down's Syndrome and Testicular Cancer with Chemotherapy and Radiotherapy: The Royal Marsden Experience. *Clinical Oncology.* 2007 Mar;19 (2):135-142. X-2, X-3.
890. Hage JJ, Karim RB and van Diest PJ. Sparing a testis during vaginoplasty in male-to-female transsexuals: does it benefit our patients? *Plast Reconstr Surg.* 2001 Jun;107(7):1772-5. X-2, X-3.
891. Hagen P, Buchholz MM, Eigenmann J, et al. Testicular dysplasia causing disturbance of spermiogenesis in patients with unilateral torsion of the testis. *Urol Int.* 1992;49(3):154-7. X-2, X-3.
892. Haghi M, Dewan A, Jones KL, et al. Endocrine abnormalities in patients with Jacobsen (11q-) syndrome. *Am J Med Genet A.* 2004 Aug 15;129A(1):62-3. X-2, X-3.
893. Hagood PG, Mehan DJ, Worischek JH, et al. Laparoscopic varicocelectomy: preliminary report of a new technique. *J Urol.* 1992 Jan;147(1):73-6. X-2, X-3.
894. Hahn EW, Feingold SM, Simpson L, et al. Recovery from aspermia induced by low-dose radiation in seminoma patients. *Cancer.* 1982 Jul 15;50(2):337-40. X-2, X-3.
895. Halachmi S, El-Ghoneimi A, Bissonnette B, et al. Hemodynamic and respiratory effect of pediatric urological laparoscopic surgery: a retrospective study. *J Urol.* 2003 Oct;170(4 Pt 2):1651-4; discussion 1654. X-4, X-5, X-6.
896. Halebian G, Kraklau D, Wilcox D, et al. Y-type urethral duplication in the male. *BJU Int.* 2006 Mar;97(3):597-602. X-2, X-3.
897. Hall S and Oates RD. Unilateral absence of the scrotal vas deferens associated with contralateral mesonephric duct anomalies resulting in infertility: Laboratory, physical and radiographic findings, and therapeutic alternatives. *Journal of Urology.* 1993;150 (4):1161-1164. X-2, X-3.
898. Hallacoglu B, Matulewicz RS, Paltiel HJ, et al. Noninvasive assessment of testicular torsion in rabbits using frequency-domain near-infrared spectroscopy: prospects for pediatric urology. *J Biomed Opt.* 2009 Sep-Oct;14(5):054027. X-2, X-3.
899. Hallen M, Sandblom G, Nordin P, et al. Male infertility after mesh hernia repair: A prospective study. *Surgery.* 2011 Feb;149(2):179-84. X-2, X-3.
900. Halliday JL, Ukoumunne OC, Baker HWG, et al. Increased risk of blastogenesis birth defects, arising in the first 4 weeks of pregnancy, after assisted reproductive technologies. *Human Reproduction.* 2010 January;25 (1):59-65. X-3.
901. Halme A, Kellokumpu-Lehtinen P, Lehtonen T, et al. Morphology of testicular germ cell tumours in treated and untreated cryptorchidism. *Br J Urol.* 1989 Jul;64(1):78-83. X-3, X-4, X-5, X-6.
902. Halperin LS, Olk RJ, Soubrane G, et al. Safety of fluorescein angiography during pregnancy. *Am J Ophthalmol.* 1990 May 15;109(5):563-6. X-2, X-3.
903. Hamdy FC and Hastie KJ. Torsion of the testis: a new technique for fixation. *Eur Urol.* 1994;25(4):338-9. X-2, X-3.
904. Hamidinia A, Nold S and Amankwah KS. Localization and treatment of nonpalpable testes. *Surgery Gynecology and Obstetrics.* 1984;159 (5):439-441. X-4, X-5, X-6.
905. Hamm B, Fobbe F and Loy V. Testicular cysts: differentiation with US and clinical findings. *Radiology.* 1988 Jul;168(1):19-23. X-2, X-3.
906. Hammar M, Berg AA and Kjessler B. In vitro metabolism of 3H-pregnenolone and 3H-progesterone by adult and prepubertal human testicular tissue before and during gonadotrophic treatment. *Arch Androl.* 1985;14(1):21-8. X-2, X-3.
907. Hammar M, Petersson F and Berg AA. In vitro conversion of progesterone in the human testis at different ages, pathophysiological conditions, and during treatment with estrogens or gonadotrophic hormones. *Arch Androl.* 1985;14(2-3):143-9. X-2, X-3.

908. Hammes B and Laitman CJ. Diethylstilbestrol (DES) update: Recommendations for the identification and management of DES-exposed individuals. *Journal of Midwifery and Women's Health*. 2003 Jan;48 (1):19-29. X-1, X-2, X-3.
909. Hammond S, Zhu R, Youngren KK, et al. Chromosome X modulates incidence of testicular germ cell tumors in Ter mice. *Mamm Genome*. 2007 Dec;18(12):832-8. X-2, X-3.
910. Hampf R, Lachman M, Novak Z, et al. Serum levels of steroid hormones in men with varicocele and oligospermia as compared to normozoospermic men. *Experimental and Clinical Endocrinology*. 1992;100 (3):117-119. X-2, X-3.
911. Hampshire AJ, Blair ME, Crown NS, et al. Is pre-school child health surveillance an effective means of detecting key physical abnormalities? *British Journal of General Practice*. 1999 Aug;49 (445):630-633. X-3.
912. Han CH and Kang SH. Epididymal anomalies associated with patent processus vaginalis in hydrocele and cryptorchidism. *J Korean Med Sci*. 2002 Oct;17(5):660-2. X-3.
913. Hanna EJ, Nevin NC and Nelson J. Genetic study of congenital heart defects in Northern Ireland (1974-1978). *J Med Genet*. 1994 Nov;31(11):858-63. X-2, X-3.
914. Hansen M, Sullivan E, Jequier AM, et al. Practitioner reporting of birth defects in children born following assisted reproductive technology: Does it still have a role in surveillance of birth defects? *Human Reproduction*. 2007 Feb;22 (2):516-520. X-2, X-3.
915. Hansen PV, Glavind K, Panduro J, et al. Paternity in patients with testicular germ cell cancer: pretreatment and post-treatment findings. *Eur J Cancer*. 1991;27(11):1385-9. X-2, X-3.
916. Hansen PV, Trykker H, Andersen J, et al. Germ cell function and hormonal status in patients with testicular cancer. *Cancer*. 1989 Aug 15;64(4):956-61. X-2, X-3.
917. Harding M, Hole D and Gillis C. The epidemiology of non-seminomatous germ cell tumours in the west of Scotland 1975-89. *Br J Cancer*. 1995 Dec;72(6):1559-62. X-2, X-3.
918. Hargreave TB, Elton RA, Webb JA, et al. Maldescended testes and fertility: a review of 68 cases. *Br J Urol*. 1984 Dec;56(6):734-9. X-2, X-3.
919. Harland SJ, Cook PA, Fossa SD, et al. Intratubular germ cell neoplasia of the contralateral testis in testicular cancer: defining a high risk group. *J Urol*. 1998 Oct;160(4):1353-7. X-2, X-3.
920. Harper L, Michel JL and De Napoli-Cocci S. Should we perform orchidopexy for cryptorchidism in children with severe encephalopathy? *J Pediatr Urol*. 2010 Jun;6(3):274-6. X-1, X-2, X-3.
921. Harris RD, Chouteau C, Partrick M, et al. Prevalence and significance of heterogeneous testes revealed on sonography: ex vivo sonographic-pathologic correlation. *AJR Am J Roentgenol*. 2000 Aug;175(2):347-52. X-2, X-3.
922. Harrison JD, Tweedie J, Wilson C, et al. Measurement of testicular blood flow at orchiopexy with a solid state laser. *Surgery*. 1991 Feb;109(2):160-2. X-3, X-4, X-5, X-6.
923. Harrison PT, Holmes P and Humfrey CD. Reproductive health in humans and wildlife: are adverse trends associated with environmental chemical exposure? *Sci Total Environ*. 1997 Oct 20;205(2-3):97-106. X-1, X-2, X-3.
924. Hasanzadeh H, Sharafi A, Allah Verdi M, et al. Assessment of absorbed dose to thyroid, parotid and ovaries in patients undergoing Gamma Knife radiosurgery. *Phys Med Biol*. 2006 Sep 7;51(17):4375-83. X-2, X-3.
925. Hassan AB and Mead GM. Germ cell cancers in adult males are associated with a history of infantile pyloric stenosis. *Eur J Cancer*. 1997 May;33(6):970-2. X-2, X-3.
926. Hassan HC, Cullen IM, Casey RG, et al. Gynaecomastia: An endocrine manifestation of testicular cancer. *Andrologia*. 2008 Jun;40 (3):152-157. X-2, X-3.
927. Haugnes HS, Wethal T, Aass N, et al. Cardiovascular risk factors and morbidity in long-term survivors of testicular cancer: a 20-year follow-up study. *J Clin Oncol*. 2010 Oct 20;28(30):4649-57. X-2, X-3.
928. Hauser R, Temple-Smith PD, Southwick GJ, et al. Fertility in cases of hypergonadotropic azoospermia. *Fertil Steril*. 1995 Mar;63(3):631-6. X-2, X-3.
929. Hawkins DA, Taylor-Robinson D, Thomas BJ, et al. Microbiological survey of acute epididymitis. *Genitourin Med*. 1986 Oct;62(5):342-4. X-2, X-3.
930. Hayn MH, Herz DB, Bellinger MF, et al. Intermittent torsion of the spermatic cord portends an increased risk of acute testicular infarction. *J Urol*. 2008 Oct;180(4 Suppl):1729-32. X-2, X-3.
931. Heidenreich A, Bonfig R, Derschum W, et al. A conservative approach to bilateral testicular germ cell tumors. *J Urol*. 1995 Jan;153(1):10-3. X-2, X-3.
932. Heidenreich A, Bonfig R, Wilbert DM, et al. Risk factors for antisperm antibodies in infertile men. *Am J Reprod Immunol*. 1994 Mar-Apr;31(2-3):69-76. X-3.
933. Heidenreich A, Holt W, Albrecht W, et al. Testis-preserving surgery in bilateral testicular germ cell tumours. *Br J Urol*. 1997 Feb;79(2):253-7. X-2, X-3.
934. Heidenreich A, Olbert P and Engelmann UH. Management of chronic testalgia by microsurgical testicular denervation. *Eur Urol*. 2002 Apr;41(4):392-7. X-2, X-3.
935. Heidenreich A, Pfister D, Witthuhn R, et al. Postchemotherapy Retroperitoneal Lymph Node Dissection in Advanced Testicular Cancer: Radical or Modified Template Resection. *European Urology*. 2009 January;55 (1):217-226. X-2, X-3.

936. Heidenreich A, Weissbach L, Holtl W, et al. Organ sparing surgery for malignant germ cell tumor of the testis. *J Urol*. 2001 Dec;166(6):2161-5. X-2, X-3.
937. Heikkila J, Taskinen S, Toppari J, et al. Posterior urethral valves are often associated with cryptorchidism and inguinal hernias. *J Urol*. 2008 Aug;180(2):715-7. X-2, X-3.
938. Heikkila R, Heilo A, Stenwig AE, et al. Testicular ultrasonography and 18G biopsy for clinically undetected cancer or carcinoma in situ in patients with germ cell tumours. *Br J Urol*. 1993 Feb;71(2):214-6. X-2, X-3.
939. Heimdal K, Olsson H, Tretli S, et al. Familial testicular cancer in Norway and southern Sweden. *Br J Cancer*. 1996 Apr;73(7):964-9. X-2, X-3.
940. Hemendinger R, Wang J, Malik S, et al. Sertoli cells improve survival of motor neurons in SOD1 transgenic mice, a model of amyotrophic lateral sclerosis. *Exp Neurol*. 2005 Dec;196(2):235-43. X-2, X-3.
941. Henderson J, Culkun D, Mata J, et al. Analysis of immunological alterations associated with testicular prostheses. *Journal of Urology*. 1995;154 (5):1748-1751. X-2, X-3.
942. Hendry WF. The long-term results of surgery for obstructive azoospermia. *Br J Urol*. 1981 Dec;53(6):664-8. X-1, X-2, X-3.
943. Hendry WF. Clinical significance of unilateral testicular obstruction in subfertile males. *Br J Urol*. 1986 Dec;58(6):709-14. X-2, X-3.
944. Hendry WF, Levison DA, Parkinson MC, et al. Testicular obstruction: clinicopathological studies. *Ann R Coll Surg Engl*. 1990 Nov;72(6):396-407. X-2, X-3.
945. Hendry WF, Parslow JM, Parkinson MC, et al. Unilateral testicular obstruction: orchidectomy or reconstruction? *Hum Reprod*. 1994 Mar;9(3):463-70. X-2, X-3.
946. Hendry WF, Parslow JM and Stedronska J. Exploratory scrototomy in 168 azoospermic males. *Br J Urol*. 1983 Dec;55(6):785-91. X-2, X-3.
947. Hendry WF, Parslow JM, Stedronska J, et al. The diagnosis of unilateral testicular obstruction in subfertile males. *Br J Urol*. 1982 Dec;54(6):774-9. X-2, X-3.
948. Henley JD, Young RH, Wade CL, et al. Seminomas with exclusive intertubular growth: a report of 12 clinically and grossly inconspicuous tumors. *Am J Surg Pathol*. 2004 Sep;28(9):1163-8. X-2, X-3.
949. Hensle TW, Burbige KA, Shepard BR, et al. Chemotherapy and its effect on testicular morphology in children. *J Urol*. 1984 Jun;131(6):1142-4. X-2, X-3.
950. Hentrich MU, Brack NG, Schmid P, et al. Testicular germ cell tumors in patients with human immunodeficiency virus infection. *Cancer*. 1996 15 May;77 (10):2109-2116. X-2, X-3.
951. Hermanek P and Sigel A. Necessary extent of lymph node dissection in testicular tumours. A histopathological investigation. *Eur Urol*. 1982;8(3):135-44. X-2, X-3.
952. Hernes EH, Harstad K and Fossa. Changing incidence and delay of testicular cancer in southern Norway (1981-1992). *Eur Urol*. 1996;30(3):349-57. X-2, X-3.
953. Herr HW. Does necrosis on frozen-section analysis of a mass after chemotherapy justify a limited retroperitoneal resection in patients with advanced testis cancer? *Br J Urol*. 1997 Oct;80(4):653-7. X-2, X-3.
954. Herr HW and Sheinfeld J. Is biopsy of the contralateral testis necessary in patients with germ cell tumors? *Journal of Urology*. 1997 Oct;158 (4):1331-1334. X-1, X-2, X-3.
955. Hibi H, Ohori T, Yamada Y, et al. Probability of sperm recovery in non-obstructive azoospermic patients presenting with testes volume less than 10 ml/FSH level exceeding 20 mIU/ml. *Arch Androl*. 2005 May-Jun;51(3):225-31. X-2, X-3.
956. Hikim AP, Chakraborty J and Jhunjhunwala JS. Unilateral torsion of spermatic cord in men: effect on Leydig cell. *Urology*. 1987 Jan;29(1):40-4. X-2, X-3.
957. Hindley RG, Chandra A, Saunders A, et al. Impalpable testis cancer. *BJU Int*. 2003 Oct;92(6):572-4. X-2, X-3.
958. Hinting A, Soebadi DM and Santoso RI. Evaluation of the immunological cause of male infertility. *Andrologia*. 1996 Mar-Apr;28(2):123-6. X-2, X-3.
959. Hiort O, Klauber G, Cendron M, et al. Molecular characterization of the androgen receptor gene in boys with hypospadias. *Eur J Pediatr*. 1994 May;153(5):317-21. X-2, X-3.
960. Ho CH, Yang SS and Tsai YC. Minilaparoscopic high-ligation with the processus vaginalis undissected and left in situ is a safe, effective, and durable treatment for pediatric hydrocele. *Urology*. 2010 Jul;76(1):134-7. X-3.
961. Ho D and Keneally JP. Analgesia following paediatric day-surgical orchidopexy and herniotomy. *Paediatr Anaesth*. 2000;10(6):627-31. X-4, X-5, X-6.
962. Ho NK. Congenital malformations in Toa Payoh hospital--a 18 year experience (1972-1989). *Ann Acad Med Singapore*. 1991 Mar;20(2):183-9. X-2, X-3.
963. Hobarth K, Susani M, Szabo N, et al. Incidence of testicular microlithiasis. *Urology*. 1992 Nov;40(5):464-7. X-2, X-3.
964. Hobarth K, Szabo N, Klingler HC, et al. Sonographic appearance of testicular microlithiasis. *Eur Urol*. 1993;24(2):251-5. X-2, X-3.
965. Hochberg Z, Chayen R, Reiss N, et al. Clinical, biochemical, and genetic findings in a large pedigree of male and female patients with 5alpha-reductase 2 deficiency. *Journal of Clinical Endocrinology and Metabolism*. 1996;81 (8):2821-2827. X-2, X-3.

966. Hod N, Maizlin Z, Strauss S, et al. The relative merits of Doppler sonography in the evaluation of patients with clinically and scintigraphically suspected testicular torsion. *Israel Medical Association Journal*. 2004 Jan;6(1):13-15. X-2, X-3.
967. Hodgson YM and de Kretser DM. Testosterone response of cryptorchid and hypophysectomized rats to human chorionic gonadotrophin (hCG) stimulation. *Aust J Biol Sci*. 1985;38(4):445-55. X-2, X-3.
968. Hoesi-Hansen CE, Kraggerud SM, Abeler VM, et al. Ovarian dysgerminomas are characterised by frequent KIT mutations and abundant expression of pluripotency markers. *Mol Cancer*. 2007;6:12. X-2, X-3.
969. Hoekstra T and Witt MA. The correlation of internal spermatic vein palpability with ultrasonographic diameter and reversal of venous flow. *J Urol*. 1995 Jan;153(1):82-4. X-2, X-3.
970. Holland AJ, Whittington JE, Butler J, et al. Behavioral phenotypes associated with specific genetic disorders: Evidence from a population-based study of people with Prader-Willi syndrome. *Psychological Medicine*. 2003 Jan;33(1):141-153. X-2, X-3.
971. Holland AJ, Whittington JE, Butler J, et al. Behavioural phenotypes associated with specific genetic disorders: evidence from a population-based study of people with Prader-Willi syndrome. *Psychol Med*. 2003 Jan;33(1):141-53. X-2, X-3.
972. Holm M, Hoesi-Hansen CE, Rajpert-De Meyts E, et al. Increased risk of carcinoma in situ in patients with testicular germ cell cancer with ultrasonic microlithiasis in the contralateral testicle. *J Urol*. 2003 Oct;170(4 Pt 1):1163-7. X-2, X-3.
973. Holm M, Rajpert-De Meyts E, Andersson AM, et al. Leydig cell micronodules are a common finding in testicular biopsies from men with impaired spermatogenesis and are associated with decreased testosterone/LH ratio. *J Pathol*. 2003 Mar;199(3):378-86. X-2, X-3.
974. Holoch PA, Mallapragada S, Ariza CA, et al. Fertility and Sterility. [Conference Abstract]. 2009 September; Conference: 65th Annual Meeting of the American Society for Reproductive Medicine, ASRM 2009 Atlanta, GA United States. Conference Start: 20091017 Conference End: 20091021. Conference: 65th Annual Meeting of the American Society for Reproductive Medicine, ASRM 2009 Atlanta, GA United States. Conference Start: 20091017 Conference End: 20091021. Conference Publication: (var.pagings). 92 (3 SUPPL. 1):S207. X-2, X-3.
975. Holt B, Pryor JP and Hendry WF. Male infertility after surgery for imperforate anus. *J Pediatr Surg*. 1995 Dec;30(12):1677-9. X-2, X-3.
976. Holt PJ, Adshead JM, Filiadis I, et al. Retroperitoneal anomalies in men with testicular germ cell tumours. *BJU Int*. 2007 Feb;99(2):344-6. X-2, X-3.
977. Holzbeierlein JM, Sogani PC and Sheinfeld J. Histology and clinical outcomes in patients with bilateral testicular germ cell tumors: the Memorial Sloan Kettering Cancer Center experience 1950 to 2001. *J Urol*. 2003 Jun;169(6):2122-5. X-2, X-3.
978. Homayoon K, Suhre CD and Steinhardt GF. Epididymal cysts in children: natural history. *J Urol*. 2004 Mar;171(3):1274-6. X-2, X-3.
979. Homonnai ZT, Fainman N, Paz GF, et al. Testicular function after herniotomy. *Herniotomy and fertility*. *Andrologia*. 1980 Mar-Apr;12(2):115-20. X-2, X-3.
980. Honzik T, Tesarova M, Mayr JA, et al. Mitochondrial encephalocardio-myopathy with early neonatal onset due to TMEM70 mutation. *Arch Dis Child*. 2010 Apr;95(4):296-301. X-2, X-3.
981. Hopps CV and Goldstein M. Ultrasound guided needle localization and microsurgical exploration for incidental nonpalpable testicular tumors. *J Urol*. 2002 Sep;168(3):1084-7. X-2, X-3.
982. Hopps CV and Goldstein M. Microsurgical reconstruction of iatrogenic injuries to the epididymis from hydrocelectomy. *J Urol*. 2006 Nov;176(5):2077-9; discussion 2080. X-2, X-3.
983. Horica CA, Hadziselimovic F, Kreutz G, et al. Ultrastructural studies of the contorted and contralateral testicle in unilateral testicular torsion. *Eur Urol*. 1982;8(6):358-62. X-2, X-3.
984. Hormann M, Balassy C, Philipp MO, et al. Imaging of the scrotum in children. *European Radiology*. 2004 Jun;14(6):974-983. X-1, X-2, X-3.
985. Hornak M and Bardos A, Jr. Diagnostic and therapeutic problems of acute scrotum. *Czech Med*. 1986;9(1):29-33. X-2, X-3.
986. Hornak M and Ondrus D. Extragenital germ cell tumours. *Int Urol Nephrol*. 1988;20(4):395-401. X-2, X-3.
987. Hornak M, Zvara V, Ondrus D, et al. Prognosis of patients after retroperitoneal lymphadenectomy for clinical stage I nonseminomatous germ cell tumour of the testis. *Czech Med*. 1987;10(2):109-16. X-2, X-3.
988. Horstman WG, Haluszka MM and Burkhard TK. Management of testicular masses incidentally discovered by ultrasound. *J Urol*. 1994 May;151(5):1263-5. X-2, X-3.
989. Horta LSG, Longui CA, Soares ES, et al. Methylation of the androgen receptor gene in cryptorchid boys. *Journal of Endocrine Genetics*. 2002;3(1):27-31. X-3.
990. Hosgor M, Karaca I, Ozer E, et al. Do alterations in collagen synthesis play an etiologic role in childhood inguinoscrotal pathologies: an immunohistochemical study. *J Pediatr Surg*. 2004 Jul;39(7):1024-9. X-2, X-3.
991. Hou JW. Natural course of neonatal progeroid syndrome. *Pediatr Neonatol*. 2009 Jun;50(3):102-9. X-2, X-3.

992. Hovatta O, Huhtaniemi I and Wahlstrom T. Testicular gonadotrophins and their receptors in human cryptorchidism as revealed by immunohistochemistry and radioreceptor assay. *Acta Endocrinol (Copenh)*. 1986 Jan;111(1):128-32. X-2, X-3.
993. Hsiang YH, Berkovitz GD, Bland GL, et al. Gonadal function in patients with Down syndrome. *Am J Med Genet*. 1987 Jun;27(2):449-58. X-2, X-3.
994. Hsiao W, Rosoff JS, Pale JR, et al. Older age is associated with similar improvements in semen parameters and testosterone after subinguinal microsurgical varicocelectomy. *J Urol*. 2011 Feb;185(2):620-5. X-2, X-3.
995. Hsieh TF, Chang CH and Chang SS. Foreskin development before adolescence in 2149 schoolboys. *International Journal of Urology*. 2006 Jul;13 (7):968-970. X-3.
996. Hsu GL, Ling PY, Hsieh CH, et al. Outpatient varicocelectomy performed under local anesthesia. *Asian J Androl*. 2005 Dec;7(4):439-44. X-2, X-3.
997. Hsu H, Lin CM, Sun TB, et al. Unilateral gracilis myofasciocutaneous advancement flap for single stage reconstruction of scrotal and perineal defects. *Journal of Plastic, Reconstructive and Aesthetic Surgery*. 2007 Sep;60 (9):1055-1059. X-2, X-3.
998. Huang CS. Surgical treatment of recurrent groin hernia. *J Formos Med Assoc*. 1999 Feb;98(2):122-7. X-2, X-3.
999. Huang CS and Liang DC. Treatment of testicular relapse in childhood acute lymphoblastic leukemia. *Zhonghua Min Guo Xiao Er Ke Yi Xue Hui Za Zhi*. 1992 Nov-Dec;33(6):401-7. X-2, X-3.
1000. Huang TT. Twenty years of experience in managing gender dysphoric patients: I. Surgical management of male transsexuals. *Plast Reconstr Surg*. 1995 Sep;96(4):921-30; discussion 931-4. X-2, X-3.
1001. Hudson MM, Frankel LS, Mullins J, et al. Diagnostic value of surgical testicular biopsy after therapy for acute lymphocytic leukemia. *J Pediatr*. 1985 Jul;107(1):50-3. X-2, X-3.
1002. Huff DS, Hadziselimovic F, Snyder HM, 3rd, et al. Early postnatal testicular maldevelopment in cryptorchidism. *J Urol*. 1991 Aug;146(2 (Pt 2)):624-6. X-3.
1003. Huff DS, Hadziselimovic F, Snyder HM, 3rd, et al. Histologic maldevelopment of unilaterally cryptorchid testes and their descended partners. *Eur J Pediatr*. 1993;152 Suppl 2:S11-4. X-2, X-3.
1004. Huff DS, Hadziselimovic F, Snyder HM, 3rd, et al. Postnatal testicular maldevelopment in unilateral cryptorchidism. *J Urol*. 1989 Aug;142(2 Pt 2):546-8; discussion 572. X-3.
1005. Huff DS, Wu HY, Snyder HM, 3rd, et al. Evidence in favor of the mechanical (intrauterine torsion) theory over the endocrinopathy (cryptorchidism) theory in the pathogenesis of testicular agenesis. *J Urol*. 1991 Aug;146(2 (Pt 2)):630-1. X-3.
1006. Huhtaniemi I, Nikula H, Rannikko S, et al. Regulation of testicular steroidogenesis by gonadotropin-releasing hormone agonists and antagonists. *J Steroid Biochem*. 1986 Jan;24(1):169-76. X-2, X-3.
1007. Humphrey GM and Najmaldin AS. Laparoscopy in the management of pediatric varicoceles. *J Pediatr Surg*. 1997 Oct;32(10):1470-2. X-3.
1008. Hunt BM, Vallieres E, Buduhan G, et al. Sarcoidosis as a benign cause of lymphadenopathy in cancer patients. *American Journal of Surgery*. 2009 May;197 (5):629-632. X-2, X-3.
1009. Hunter AG and Stevenson RE. Gastroschisis: clinical presentation and associations. *Am J Med Genet C Semin Med Genet*. 2008 Aug 15;148C(3):219-30. X-2, X-3.
1010. Huseby RA. Dormancy versus extinction of mouse Leydig cell tumors following endocrine-induced regression. *Cancer Research*. 1983;43 (11):5365-5378. X-2, X-3.
1011. Hussein TM, Zakaria NH and Zahran AM. Clinical, laboratory and genetic assessment of patients with congenital bilateral absent vas deferens. *Andrologia*. 2011 Feb;43(1):16-22. X-2, X-3.
1012. Hustin J, Collette J and Franchimont P. Immunohistochemical demonstration of placental alkaline phosphatase in various states of testicular development and in germ cell tumours. *Int J Androl*. 1987 Feb;10(1):29-35. X-3.
1013. Hutcheson JC, Snyder HM, 3rd, Zuniga ZV, et al. Ectopic and undescended testes: 2 variants of a single congenital anomaly? *J Urol*. 2000 Mar;163(3):961-3. X-3.
1014. Hutson JM, Albano FR, Paxton G, et al. In vitro fusion of human inguinal hernia with associated epithelial transformation. *Cells Tissues Organs*. 2000;166 (3):249-258. X-2, X-3.
1015. Hutson JM, Balic A, Nation T, et al. Cryptorchidism. *Seminars in Pediatric Surgery*. 2010 August;19 (3):215-224. X-1, X-2, X-3.
1016. Hutson JM and Clarke MCC. Current management of the undescended testicle. *Seminars in Pediatric Surgery*. 2007 Feb;16 (1):64-70. X-1, X-2, X-3.
1017. Huyghe E, Soulie M, Escourrou G, et al. Conservative management of small testicular tumors relative to carcinoma in situ prevalence. *J Urol*. 2005 Mar;173(3):820-3. X-2, X-3.
1018. Hwang TIS, Lin YC, Lee MCC, et al. The effects of medical castration on testes in patients with advanced prostate cancer. *Urological Science*. 2010 December;21 (4):169-174. X-2, X-3.
1019. Iacono F, Capparelli G and Darmiento M. Bilateral varicocele repair by transscrotal extratunica vaginalis procedure in outpatients: a novel technique. *Tech Urol*. 2000 Sep;6(3):196-200. X-2, X-3.
1020. Iarchy J. Peritoneography, a safe method to assess the bilaterality of inguinal hernias in children with an obvious unilateral hernia or cryptorchidism (100 cases). *Acta Chir Belg*. 1983 Jul-Aug;83(4):253-60. X-2, X-3.
1021. Ibingira CB. Long-term complications of inguinal hernia repair. *East Afr Med J*. 1999 Jul;76(7):396-9. X-2, X-3.

1022. Iida T, Park S, Kato K, et al. Cleft palate in Kabuki syndrome: A report of six cases. *Cleft Palate-Craniofacial Journal*. 2006 Nov;43 (6):756-761. X-2, X-3.
1023. Ikeda H, Hatanaka M, Suzuki M, et al. A selective sac extraction method: another minimally invasive procedure for inguinal hernia repair in children: a technical innovation with satisfactory surgical and cosmetic results. *J Pediatr Surg*. 2009 Aug;44(8):1666-71. X-2, X-3.
1024. Ikoma F and Shima H. Caudal migration of the verumontanum. *J Pediatr Surg*. 1991 Jul;26(7):858-61. X-2, X-3.
1025. Imajima T, Shono T, Kai H, et al. The biological effect of phthalate esters on transabdominal migration of the testis in fetal rats in comparison with the antiandrogen flutamide. *Pediatr Surg Int*. 2001 Mar;17(2-3):164-6. X-2, X-3.
1026. Imthurn T, Hadziselimovic F and Herzog B. Impaired germ cells in secondary cryptorchid testis after herniotomy. *J Urol*. 1995 Mar;153(3 Pt 1):780-1. X-3.
1027. Inaba Y, Fujisawa M, Okada H, et al. Clinical outcome of microsurgery for obstructive azoospermia. *Int J Urol*. 1999 Mar;6(3):139-44. X-2, X-3.
1028. Inci K, Duzova A, Aki FT, et al. Semen variables and hormone profiles after kidney transplantation during adolescence. *Transplant Proc*. 2006 Mar;38(2):541-2. X-2, X-3.
1029. Inci K, Hascicek M, Kara O, et al. Sperm retrieval and intracytoplasmic sperm injection in men with nonobstructive azoospermia, and treated and untreated varicocele. *J Urol*. 2009 Oct;182(4):1500-5. X-2, X-3.
1030. Ingimarsson O and Spak I. Inguinal and femoral hernias. Long-term results in a community hospital. *Acta Chir Scand*. 1983;149(3):291-7. X-2, X-3.
1031. Ishigami K, Abu-Yousef MM and El-Zein Y. Tubular ectasia of the epididymis: a sign of postvasectomy status. *J Clin Ultrasound*. 2005 Dec;33(9):447-51. X-2, X-3.
1032. Ishizaka K, Suzuki M, Kageyama Y, et al. Bone mineral density in hypogonadal men remains low after long-term testosterone replacement. *Asian J Androl*. 2002 Jun;4(2):117-21. X-2, X-3.
1033. Iskit SH, Dagli TE, Kiyan G, et al. Interstitial hernia: a diagnostic dilemma in infants and children. *J Pediatr Surg*. 1998 Apr;33(4):586-8. X-3, X-4, X-5, X-6.
1034. Issa MM, Krishnan A, Bouet R, et al. The fate of the medically castrated testis: expectation versus reality. *J Urol*. 2004 Sep;172(3):1042-4. X-2, X-3.
1035. Issa MM, Lendvay TS, Bouet R, et al. Epididymal sparing bilateral simple orchiectomy with epididymoplasty: preservation of esthetics and body image. *J Urol*. 2005 Sep;174(3):893-7. X-2, X-3.
1036. Isurugi K, Hasegawa F, Shibahara N, et al. Incomplete testicular feminization syndrome: Studies on androgen receptor(AR) function, AR gene analysis, and aromatase activities at puberty and long-term observations of clinical and hormonal features from infancy to puberty. *Endocrine Journal*. 1996;43 (5):557-564. X-2, X-3.
1037. Itoh M, Moriyama H, Tokunaga Y, et al. Embryological consideration of drainage of the left testicular vein into the ipsilateral renal vein: Analysis of cases of a double inferior vena cava. *International Journal of Andrology*. 2001;24 (3):142-152. X-2, X-3.
1038. Ivell R and Anand-ivell R. Biology of insulin-like factor 3 in human reproduction. *Human Reproduction Update*. 2009;15 (4):463-476. X-1, X-2, X-3.
1039. Ivell R and Hartung S. The molecular basis of cryptorchidism. *Molecular Human Reproduction*. 2003 01 Apr;9 (4):175-181. X-1, X-3.
1040. Izumi K, Konaka H, Seto C, et al. A case of bilateral testicular calcifications in a bicycle motocross rider accompanied by bulbar urethral injury. *Hinyokika Kyo*. 2006 May;52(5):383-5. X-1, X-2, X-3.
1041. Jaakkola E, Mustonen A, Olsen P, et al. ERCC6 founder mutation identified in Finnish patients with COFS syndrome. *Clinical Genetics*. 2010 December;78 (6):541-547. X-2, X-3.
1042. Jackson SM, Olivotto I, McLoughlin MG, et al. Radiation therapy for seminoma of the testis: results in British Columbia. *Can Med Assoc J*. 1980 Sep 20;123(6):507-12. X-2, X-3.
1043. Jacob S, Spillane H, Keane D, et al. Initial experiences of a testicular sperm extraction programme for assisted reproduction in Ireland. *Ir J Med Sci*. 2000 Jan-Mar;169(1):26-9. X-2, X-3.
1044. Jacobsen KD, Fossa SD, Bjoro TP, et al. Gonadal function and fertility in patients with bilateral testicular germ cell malignancy. *Eur Urol*. 2002 Sep;42(3):229-38; discussion 237-8. X-2, X-3.
1045. Jacobsen KD, Ous S, Waehre H, et al. Ejaculation in testicular cancer patients after post-chemotherapy retroperitoneal lymph node dissection. *Br J Cancer*. 1999 Apr;80(1-2):249-55. X-2, X-3.
1046. Jacobsen KD, Theodorsen L and Fossa SD. Spermatogenesis after unilateral orchiectomy for testicular cancer in patients following surveillance policy. *J Urol*. 2001 Jan;165(1):93-6. X-2, X-3.
1047. Jadot-Van De Casseye M, De Bled G, Gepts W, et al. An immunohistochemical study for testicular biopsies in cases of male infertility. *Andrologia*. 1980 Mar-Apr;12(2):122-9. X-2, X-3.
1048. Janetschek G, Hobisch A, Hittmair A, et al. Laparoscopic retroperitoneal lymphadenectomy after chemotherapy for stage IIB nonseminomatous testicular carcinoma. *J Urol*. 1999 Feb;161(2):477-81. X-2, X-3.
1049. Janetschek G, Hobisch A, Peschel R, et al. Laparoscopic retroperitoneal lymph node dissection for clinical stage I nonseminomatous testicular carcinoma: long-term outcome. *J Urol*. 2000 Jun;163(6):1793-6. X-2, X-3.
1050. Janzen DL, Mathieson JR, Marsh JI, et al. Testicular microlithiasis: sonographic and clinical features. *AJR Am J Roentgenol*. 1992 May;158(5):1057-60. X-2, X-3.

1051. Jarow JP. Clinical significance of intratesticular arterial anatomy. *J Urol*. 1991 Apr;145(4):777-9. X-2, X-3.
1052. Jarow JP, Chen H, Rosner TW, et al. Assessment of the androgen environment within the human testis: minimally invasive method to obtain intratesticular fluid. *J Androl*. 2001 Jul-Aug;22(4):640-5. X-2, X-3.
1053. Jarow JP, Espeland MA and Lipshultz LI. Evaluation of the azoospermic patient. *J Urol*. 1989 Jul;142(1):62-5. X-2, X-3.
1054. Jarvi K, McCallum S, Zielenski J, et al. Heterogeneity of reproductive tract abnormalities in men with absence of the vas deferens: role of cystic fibrosis transmembrane conductance regulator gene mutations. *Fertil Steril*. 1998 Oct;70(4):724-8. X-2, X-3.
1055. Jasper HG. Somatomedin response to testosterone stimulation in children with male pseudohermaphroditism, cryptorchidism, anorchia, or micropenis. *J Clin Endocrinol Metab*. 1985 May;60(5):910-3. X-2, X-3.
1056. Javadpour N, Ozols RF, Anderson T, et al. A randomized trial of cytoreductive surgery followed by chemotherapy versus chemotherapy alone in bulky stage testicular cancer with poor prognostic features. *Cancer*. 1982 Nov 15;50(10):2004-10. X-2, X-3.
1057. Jemelik R, Penickova V and Vyborny K. Testalgia caused by dysfunction at the thoraco-lumbar junction. *Journal of Manual Medicine*. 1992;6 (6):189. X-2, X-3.
1058. Jensen MS, Bonde JP and Olsen J. Prenatal alcohol exposure and cryptorchidism. *Acta Paediatr*. 2007 Nov;96(11):1681-5. X-3, X-4, X-5, X-6.
1059. Jensen MS, Rebordosa C, Thulstrup AM, et al. Human Reproduction. [Conference Abstract]. 2010 June; Conference: 26th Annual Meeting of the European Society of Human Reproduction and Embryology, ESHRE Rome Italy. Conference Start: 20100627 Conference End: 20100630. Conference: 26th Annual Meeting of the European Society of Human Reproduction and Embryology, ESHRE Rome Italy. Conference Start: 20100627 Conference End: 20100630. Conference Publication: (var.pagings). 25:i135. X-3, X-4, X-5, X-6.
1060. Jensen MS, Rebordosa C, Thulstrup AM, et al. Maternal use of acetaminophen, ibuprofen, and acetylsalicylic acid during pregnancy and risk of cryptorchidism. *Epidemiology*. 2010 Nov;21(6):779-85. X-2, X-3.
1061. Jensen MS, Toft G, Thulstrup AM, et al. Cryptorchidism according to maternal gestational smoking. *Epidemiology*. 2007 Mar;18(2):220-5. X-2, X-3.
1062. Jensen MS, Toft G, Thulstrup AM, et al. Cryptorchidism concordance in monozygotic and dizygotic twin brothers, full brothers, and half-brothers. *Fertil Steril*. 2010 Jan;93(1):124-9. X-2, X-3.
1063. Jensen TK, Vierula M, Hjollund NHI, et al. Semen quality among Danish and Finnish men attempting to conceive. *European Journal of Endocrinology*. 2000 Jan;142 (1):47-52. X-2, X-3.
1064. Jequier AM and Holmes SC. Primary testicular disease presenting as azoospermia or oligozoospermia in an infertility clinic. *Br J Urol*. 1993 Jun;71(6):731-5. X-2, X-3.
1065. Jequier AM and Phillips N. Cystic dilatation of the rete testis: a hidden diagnosis among infertile men. *Reprod Biomed Online*. 2009 Feb;18(2):190-4. X-2, X-3.
1066. Jequier S, Patriquin H, Filiatrault D, et al. Duplex Doppler sonographic examinations of the testis in prepubertal boys. *J Ultrasound Med*. 1993 Jun;12(6):317-22. X-2, X-3.
1067. Jewett MA. Nerve-sparing technique for retroperitoneal lymphadenectomy in testis cancer. *Urol Clin North Am*. 1990 May;17(2):449-56. X-2, X-3.
1068. Jewett MA, Kong YS, Goldberg SD, et al. Retroperitoneal lymphadenectomy for testis tumor with nerve sparing for ejaculation. *J Urol*. 1988 Jun;139(6):1220-4. X-2, X-3.
1069. Jewett MA, Thachil JV and Harris JF. Exocrine function of testis with germinal testicular tumour. *Br Med J (Clin Res Ed)*. 1983 Jun 11;286(6381):1849-50. X-2, X-3.
1070. Jezek D, Banek L, Hittmair A, et al. Mast cells in testicular biopsies of infertile men with 'mixed atrophy' of seminiferous tubules. *Andrologia*. 1999 Jul;31(4):203-10. X-2, X-3.
1071. Jezek D, Knuth UA and Schulze W. Successful testicular sperm extraction (TESE) in spite of high serum follicle stimulating hormone and azoospermia: correlation between testicular morphology, TESE results, semen analysis and serum hormone values in 103 infertile men. *Hum Reprod*. 1998 May;13(5):1230-4. X-2, X-3.
1072. Jhaveri KS, Mazrani W, Chawla TP, et al. The role of cross-sectional imaging in male infertility: A pictorial review. *Canadian Association of Radiologists Journal*. 2010 June;61 (3):144-155. X-1, X-2, X-3.
1073. Jiang R, Chen JH, Chen M, et al. Male genital schwannoma, review of 5 cases. *Asian Journal of Andrology*. 2003 Sep;5 (3):251-254. X-2, X-3.
1074. Jimenez-Lopez M, Ramirez-Garrido F, Lopez-Gonzalez Garrido JD, et al. Dilatation of the rete testis: ultrasound study. *Eur Radiol*. 1999;9(7):1327-9. X-2, X-3.
1075. Jingde Z, Xin X, Entan G, et al. Surgical treatment of hermaphroditism: Experience with 25 cases. *Annals of Plastic Surgery*. 2009 November;63 (5):543-551. X-3, X-4, X-5, X-6.
1076. Jinno M, Ozaki T, Nakamura Y, et al. Predicting sperm retrieval rates in testicular sperm extraction for azoospermia according to endocrine profiles. *Reproductive Medicine and Biology*. 2005 Dec;4 (4):239-245. X-2, X-3.

1077. Joao EC, Calvet GA, Krauss MR, et al. Maternal antiretroviral use during pregnancy and infant congenital anomalies: The NISDI perinatal study. *Journal of Acquired Immune Deficiency Syndromes*. 2010 February;53(2):176-185. X-2, X-3.
1078. Johansen TE and Blom GP. Histological studies of gubernaculum testis taken during orchiopexies. *Scand J Urol Nephrol*. 1988;22(2):107-8. X-2, X-3.
1079. Johansen TE and Klein H. Evidence of androgen receptivity in the pathway of testicular descent in humans. A postnatal study. *Eur Urol*. 1993;23(4):466-8. X-3.
1080. John CM, Kooner G, Mathew DE, et al. Neonatal testicular torsion--a lost cause? *Acta Paediatr*. 2008 Apr;97(4):502-4. X-2, X-3.
1081. John H and Schmid C. Kallmann's syndrome: Clues to clinical diagnosis. *International Journal of Impotence Research*. 2000;12(5):269-271. X-2, X-3.
1082. Johnson AR, 3rd and Jarow JP. Is routine endocrine testing of impotent men necessary? *J Urol*. 1992 Jun;147(6):1542-3; discussion 1543-4. X-2, X-3.
1083. Johnson D, Jones K and Chambers C. *Canadian Journal of Gastroenterology*. Conference: Canadian Digestive Diseases Week. [Conference Abstract]. 2009;20090227(20090302). X-2, X-3.
1084. Johnson DK and Perlmutter AD. Single system ectopic ureteroceles with anomalies of the heart, testis and vas deferens. *J Urol*. 1980 Jan;123(1):81-3. X-2, X-3.
1085. Johnson DL, Jones KL, Chambers CD, et al. *Gastroenterology*. [Conference Abstract]. 2009 May;Conference: Digestive Disease Week, DDW 2009 Chicago, IL United States. Conference Start: 20090530 Conference End: 20090604. Conference: Digestive Disease Week, DDW 2009 Chicago, IL United States. Conference Start: 20090530 Conference End: 20090604. Conference Publication: (var.pagings). 136 (5 SUPPL. 1):A27. X-3.
1086. Jones DJ. Recurrent subacute torsion: prospective study of effects on testicular morphology and function. *J Urol*. 1991 Feb;145(2):297-9. X-2, X-3.
1087. Jones DJ, Macreadie D and Morgans BT. Testicular torsion in the armed services: twelve year review of 179 cases. *Br J Surg*. 1986 Aug;73(8):624-6. X-2, X-3.
1088. Jones EC, Murray SK and Young RH. Cysts and epithelial proliferations of the testicular collecting system (including rete testis). *Seminars in Diagnostic Pathology*. 2000;17(4):270-293. X-2, X-3.
1089. Jones HB, Betton GR, Bowdler AL, et al. Pathological and morphometric assessment of testicular parameters in patients with metastatic prostate cancer following treatment with either the antiandrogen Casodex (ZM176,334) or bilateral orchidectomy. *Urol Res*. 1994;22(3):191-5. X-2, X-3.
1090. Jones ME, Swerdlow AJ, Griffith M, et al. Prenatal risk factors for cryptorchidism: a record linkage study. *Paediatr Perinat Epidemiol*. 1998 Oct;12(4):383-96. X-2, X-3.
1091. Jones TD, MacLennan GT, Bonnin JM, et al. Screening for intratubular germ cell neoplasia of the testis using OCT4 immunohistochemistry. *Am J Surg Pathol*. 2006 Nov;30(11):1427-31. X-2, X-3.
1092. Jones TH and Darne JF. Self-administered subcutaneous human menopausal gonadotrophin for the stimulation of testicular growth and the initiation of spermatogenesis in hypogonadotrophic hypogonadism. *Clin Endocrinol (Oxf)*. 1993 Feb;38(2):203-8. X-2, X-3.
1093. Jones VS and Cohen RC. Two decades of minimally invasive pediatric surgery-taking stock. *J Pediatr Surg*. 2008 Sep;43(9):1653-9. X-3.
1094. Jorgensen N, Meyts ER, Main KM, et al. Testicular dysgenesis syndrome comprises some but not all cases of hypospadias and impaired spermatogenesis. *Int J Androl*. 2010 Apr;33(2):298-303. X-1, X-2, X-3.
1095. Jorgez C, Whirledge S, Sahin A, et al. *Journal of Andrology*. [Conference Abstract]. 2010 March-April;Conference: 35th Annual Meeting of the American Society of Andrology, ASA Houston, TX United States. Conference Start: 20100410 Conference End: 20100413. Conference: 35th Annual Meeting of the American Society of Andrology, ASA Houston, TX United States. Conference Start: 20100410 Conference End: 20100413. Conference Publication: (var.pagings). 31:54. X-2, X-3.
1096. Jose B, Perkins LP, Kays H, et al. Is mediastinal irradiation necessary for stage I testicular seminoma? *J Surg Oncol*. 1984 Apr;25(4):250-1. X-2, X-3.
1097. Joseph VT. Pudendal-thigh flap vaginoplasty in the reconstruction of genital anomalies. *J Pediatr Surg*. 1997 Jan;32(1):62-5. X-2, X-3.
1098. Joseph VT and Fong PH. Undescended testis: a study of 212 cases treated surgically. *Ann Acad Med Singapore*. 1981 Oct;10(4):502-6. X-4, X-5, X-6.
1099. Joshi W, Connelly NR, Freeman K, et al. Analgesic effect of clonidine added to bupivacaine 0.125% in paediatric caudal blockade. *Paediatr Anaesth*. 2004 Jun;14(6):483-6. X-2, X-3.
1100. Josso N. Paediatric applications of anti-mullerian hormone research. 1992 Andrea Prader Lecture. *Horm Res*. 1995;43(6):243-8. X-1, X-2, X-3.
1101. Jugenburg I and Kipikasa A. Fertility in patients with hypospadias. *Acta Chirurgiae Plasticae*. 1988;30(2):86-93. X-3.
1102. Jung A, Schill WB and Schuppe HC. Genital heat stress in men of barren couples: a prospective evaluation by means of a questionnaire. *Andrologia*. 2002 Dec;34(6):349-55. X-2, X-3.
1103. Jung A, Schill WB and Schuppe HC. Improvement of semen quality by nocturnal scrotal cooling in oligozoospermic men with a history of testicular maldescent. *Int J Androl*. 2005 Apr;28(2):93-8. X-2, X-3.

1104. Kabay S, Yucel M, Ozden H, et al. Magnetic resonance imaging is a complementary method to stereological measurement of testicular volume. *Urology*. 2009 May;73(5):1131-5. X-2, X-3.
1105. Kadioglu A, Tefekli A, Cayan S, et al. Microsurgical inguinal varicocele repair in azoospermic men. *Urology*. 2001 Feb;57(2):328-33. X-2, X-3.
1106. Kaftanovskaya EM, Feng S, Huang Z, et al. Suppression of insulin-like3 receptor reveals the role of beta-catenin and Notch signaling in gubernaculum development. *Mol Endocrinol*. 2011 Jan;25(1):170-83. X-2, X-3.
1107. Kaiho Y, Nakagawa H, Ito A, et al. Ipsilateral seminal emission generated by electrostimulation of the lumbar sympathetic nerve during nerve sparing laparoscopic retroperitoneal lymph node dissection for testicular cancer. *J Urol*. 2004 Sep;172(3):928-31. X-2, X-3.
1108. Kajbafzadeh AM and Payabvash S. Endoscopic treatment of vesicovasal and vesicoureteral reflux in infants with persisting mesonephric duct. *J Urol*. 2006 Dec;176(6 Pt 1):2657-62. X-2, X-3.
1109. Kajbafzadeh AM, Talab SS, Elmi A, et al. Modified scrotal approach for correction of abdominoscrotal hydrocele in children: clinical presentation and description of technique. *Urology*. 2010 Jul;76(1):87-91. X-2, X-3.
1110. Kaleva M, Virtanen H, Haavisto AM, et al. Does variant luteinizing hormone (V-LH) predispose to improper testicular position in late pregnancy? *Pediatr Res*. 2005 Sep;58(3):447-50. X-3.
1111. Kaleva M, Virtanen HE, Haavisto AM, et al. Circannual rhythm in the incidence of cryptorchidism in Finland. *Int J Androl*. 2005 Feb;28(1):53-7. X-3.
1112. Kalita J, Misra UK, Mishra DK, et al. Nonprogressive juvenile-onset spinal muscular atrophy: A clinico-radiological and CAG repeat study of androgen receptor gene. *J Neurol Sci*. 2007 Jan 15;252(1):24-8. X-2, X-3.
1113. Kallen B. Hyperemesis during pregnancy and delivery outcome: a registry study. *Eur J Obstet Gynecol Reprod Biol*. 1987 Dec;26(4):291-302. X-2, X-3.
1114. Kallen B, Bertollini R, Castilla E, et al. A joint international study on the epidemiology of hypospadias. *Acta Paediatr Scand Suppl*. 1986;324:1-52. X-2, X-3.
1115. Kallen BAJ, Olausson PO and Danielsson BR. Is erythromycin therapy teratogenic in humans? *Reproductive Toxicology*. 2005 Jul;20 (2):209-214. X-2, X-3.
1116. Kamal A, Fahmy I, Mansour R, et al. Does the outcome of ICSI in cases of obstructive azoospermia depend on the origin of the retrieved spermatozoa or the cause of obstruction? A comparative analysis. *Fertil Steril*. 2010 Nov;94(6):2135-40. X-2, X-3.
1117. Kamaledeen S and Surana R. Intermittent testicular pain: fix the testes. *BJU Int*. 2003 Mar;91(4):406-8. X-2, X-3.
1118. Kamischke A, Jurgens H, Hertle L, et al. Cryopreservation of sperm from adolescents and adults with malignancies. *J Androl*. 2004 Jul-Aug;25(4):586-92. X-2, X-3.
1119. Kaneko K and Tsuda M. Four-triangular-skin-flap approach to umbilical diseases and laparoscopic umbilical port. *J Pediatr Surg*. 2004 Sep;39(9):1404-7. X-2, X-3.
1120. Kann P, Hengstermann C, Heussel CP, et al. Endosonography of the adrenal glands: normal size--pathological findings. *Exp Clin Endocrinol Diabetes*. 1998;106(2):123-9. X-2, X-3.
1121. Kanto S, Hiramatsu M, Suzuki K, et al. Risk factors in past histories and familial episodes related to development of testicular germ cell tumor. *Int J Urol*. 2004 Aug;11(8):640-6. X-2, X-3.
1122. Kanyo K and Konc J. A follow-up study of children born after diode laser assisted hatching. *European Journal of Obstetrics Gynecology and Reproductive Biology*. 2003 10 Oct;110 (2):176-180. X-2, X-3.
1123. Kaplan BS, Kaplan P and Kessler A. Cystic kidneys associated with connective tissue disorders. *American Journal of Medical Genetics*. 1997 17 Mar;69 (2):133-137. X-2, X-3.
1124. Kaplan GW. Nomenclature of cryptorchidism. *Eur J Pediatr*. 1993;152 Suppl 2:S17-9. X-1, X-2, X-3.
1125. Kaplan JD, Bernstein JA, Kwan A, et al. Clues to an early diagnosis of Kallmann syndrome. *American Journal of Medical Genetics, Part A*. 2010 November;152 (11):2796-2801. X-3.
1126. Kaplan JH, Kudish HG and Sacks SA. Testicular tumors of germ cell origin. 1. Epidemiology, pathogenesis, clinical presentation, and diagnosis. *Postgrad Med*. 1981 Dec;70(6):114-21. X-1, X-2, X-3.
1127. Kaplan LM, Koyle MA and Kaplan GW. Association between abdominal wall defects and cryptorchidism. *Journal of Urology*. 1986;136 (3):645-647. X-3.
1128. Kaplan WE and Firlit CF. Treatment of testicular yolk sac carcinoma in the young child. *J Urol*. 1981 Nov;126(5):663-4. X-2, X-3.
1129. Kaponis A, Yiannakis D, Tsoukanelis K, et al. The role of ultrasonographically guided puncture of the human rete testis in the therapeutic management of nonobstructive azoospermia. *Andrologia*. 2003 Apr;35(2):85-92. X-2, X-3.
1130. Karam M, Roberts-Klein S, Shet N, et al. Bilateral hilar foci on 18F-FDG PET scan in patients without lung cancer: Variables associated with benign and malignant etiology. *Journal of Nuclear Medicine*. 2008 01 Sep;49 (9):1429-1436. X-1, X-2, X-3, X-9.
1131. Karaman IM, Kaya C, Ozturk M, et al. The effects of human chorionic gonadotrophin on normal testicular tissue of rats: dose-dependence and reversibility. *BJU Int*. 2006 May;97(5):1116-8. X-2, X-3.

1132. Kashif M, Haq MR and Hussain N. Perinatal testicular torsion: Some facts and figures. *Medical Forum Monthly*. 2009 January;20 (1):28-31. X-3.
1133. Kass EJ, Freitas JE, Salisz JA, et al. Pituitary gonadal dysfunction in adolescents with varicocele. *Urology*. 1993 Aug;42(2):179-81. X-2, X-3.
1134. Kass EJ, Stork BR and Steinert BW. Varicocele in adolescence induces left and right testicular volume loss. *BJU Int*. 2001 Apr;87(6):499-501. X-2, X-3.
1135. Kaufman DG and Nagler HM. Aspiration flow cytometry of the testes in the evaluation of spermatogenesis in the infertile male. *Fertil Steril*. 1987 Aug;48(2):287-91. X-2, X-3.
1136. Kavic MS. Laparoscopic hernia repair. *Surg Endosc*. 1993 May-Jun;7(3):163-7. X-2, X-3.
1137. Kawada T, Yamanaka H and Hasegawa Y. Decreased immunoreactive inhibin and increased FSH levels in cryptorchidism after orchidopexy. *Endocr J*. 1995 Aug;42(4):577-80. X-4, X-5, X-6.
1138. Kawame H, Matsui M, Kurosawa K, et al. Further delineation of the behavioral and neurologic features in Costello syndrome. *American Journal of Medical Genetics*. 2003 01 Apr;118 A (1):8-14. X-2, X-3.
1139. Kaye JD, Levitt SB, Friedman SC, et al. Neonatal torsion: a 14-year experience and proposed algorithm for management. *J Urol*. 2008 Jun;179(6):2377-83. X-2, X-3.
1140. Kaye KW. Modified high varicoectomy: outpatient microsurgical procedure. *Urology*. 1988 Jul;32(1):13-6. X-2, X-3.
1141. Kehinde EO, Mojiminiyi OA, Mahmoud AH, et al. The significance of measuring the time course of serum malondialdehyde concentration in patients with torsion of the testis. *J Urol*. 2003 Jun;169(6):2177-80. X-2, X-3.
1142. Kelly D, Harte FB and Roe P. Urinary tract anomalies in patients with hypospadias. *Br J Urol*. 1984 Jun;56(3):316-8. X-2, X-3.
1143. Kenkel S, Rolf C and Nieschlag E. Occupational risks for male fertility: An analysis of patients attending a tertiary referral centre. *International Journal of Andrology*. 2001;24 (6):318-326. X-2, X-3.
1144. Kessar DN and Mellinger BC. Incidence and implication of testicular microlithiasis detected by scrotal duplex sonography in a select group of infertile men. *Journal of Urology*. 1994;152 (5 1):1560-1561. X-2, X-3.
1145. Ketata S, Ketata H, Sahnoun A, et al. Ectopic adrenal cortex tissue: an incidental finding during inguinoscrotal operations in pediatric patients. *Urol Int*. 2008;81(3):316-9. X-2, X-3.
1146. Ketola I, Pentikainen V, Vaskivuo T, et al. Expression of transcription factor GATA-4 during human testicular development and disease. *J Clin Endocrinol Metab*. 2000 Oct;85(10):3925-31. X-2, X-3.
1147. Khaleghnejad-Tabari A, Mirshermirani A, Rouzrokh M, et al. Early exploration in the management of acute scrotum in children. *Iranian Journal of Pediatrics*. 2010;20 (4):466-470. X-4, X-5, X-6.
1148. Khan BAH, UI Haq RN, Khan FB, et al. Role of diagnostic laparoscopy: A study of 58 patients. *Medical Forum Monthly*. 2010 December;21 (12):3-5. X-4, X-5, X-6.
1149. Khan FA, Memon GA and Kamal RS. Effect of route of buprenorphine on recovery and postoperative analgesic requirement in paediatric patients. *Paediatr Anaesth*. 2002 Nov;12(9):786-90. X-2, X-3.
1150. Khan MA, Khan K, Khan Y, et al. Testicular re-routing in high undescended testis. *JPMI - Journal of Postgraduate Medical Institute*. 2009 July-September;23 (3):263-266. X-4, X-5, X-6.
1151. Khan MS, Humayoon MS and Al Manee MS. Epididymo-orchitis and Brucellosis. *Br J Urol*. 1989 Jan;63(1):87-9. X-3.
1152. Kibar Y, Frimberger D, Kropp BP, et al. Accuracy of perinatal diagnosis of 45,X/46,XY mosaicism and electronic consultation of affected parents. *J Pediatr Urol*. 2009 Aug;5(4):274-8. X-2, X-3.
1153. Kidney DD, Cohen AJ and Seville P. Original report. Retractable testis: An incidental CT finding in trauma patients. *American Journal of Roentgenology*. 1997;168 (5):1233-1234. X-2, X-3.
1154. Kiely EA, Chapman RS, Bajoria SK, et al. Maternal serum human chorionic gonadotrophin during early pregnancy resulting in boys with hypospadias or cryptorchidism. *Br J Urol*. 1995 Sep;76(3):389-92. X-3.
1155. Kiesewetter WB, Mammen K and Kalyglou M. The rationale and results in two-stage orchidopexies. *J Pediatr Surg*. 1981 Aug;16(4 Suppl 1):631-5. X-4, X-5, X-6.
1156. Kiesling VJ, Jr., Schroeder DE, Pauljev P, et al. Spermatic cord block and manual reduction: primary treatment for spermatic cord torsion. *J Urol*. 1984 Nov;132(5):921-3. X-2, X-3.
1157. Kim ED, Leibman BB, Grinblat DM, et al. Varicocele repair improves semen parameters in azoospermic men with spermatogenic failure. *J Urol*. 1999 Sep;162(3 Pt 1):737-40. X-2, X-3.
1158. Kim TH, Hargreaves HK, Chan WC, et al. Sequential testicular biopsies in childhood acute lymphocytic leukemia. *Cancer*. 1986 Mar 1;57(5):1038-41. X-2, X-3.
1159. Kimura T, Suzuki A, Fujita Y, et al. Conditional loss of PTEN leads to testicular teratoma and enhances embryonic germ cell production. *Development*. 2003 Apr;130(8):1691-700. X-2, X-3.
1160. King LR. Orchidopexy for impalpable testis: high spermatic vessel division is a safe maneuver. *J Urol*. 1998 Dec;160(6 Pt 2):2457-60. X-4, X-5, X-6.
1161. Kingsley D, Vogt DM, Nelson MT, et al. Laparoscopic intraperitoneal onlay inguinal herniorrhaphy. *Am J Surg*. 1998 Dec;176(6):548-53. X-2, X-3.
1162. Kinkade S. Testicular cancer. *American Family Physician*. 1999 01 May;59 (9):2539-2544. X-2, X-3.
1163. Kirby RS, Chapple CR, Ward SP, et al. Is the scrotal testis normal in unilateral cryptorchidism? *Br J Urol*. 1985 Apr;57(2):187-9. X-4, X-5, X-6.

1164. Kirkilionis AJ, Pozsonyi J and Sergovich FR. The use of testicular volume as a clinical marker for cytogenetic disorders in mentally retarded males. *J Ment Defic Res.* 1988 Feb;32 (Pt 1):19-30. X-2, X-3.
1165. Kiss A, Csontai A, Merksz M, et al. Intrascrotal and testicular solid masses in childhood. *Int Urol Nephrol.* 1996;28(6):787-92. X-2, X-3.
1166. Kitajima K, Nakamoto Y, Senda M, et al. Normal uptake of 18F-FDG in the testis: an assessment by PET/CT. *Ann Nucl Med.* 2007 Sep;21(7):405-10. X-2, X-3.
1167. Kitilla T. Relationships of testicular volume and fine-needle aspiration cytology pattern in infertile azoospermic men (Fgae Central Clinic, 2003-4). *Ethiop Med J.* 2007 Jan;45(1):19-28. X-2, X-3.
1168. Kjaer D, Horvath-Puho E, Christensen J, et al. Use of phenytoin, phenobarbital, or diazepam during pregnancy and risk of congenital abnormalities: A case-time-control study. *Pharmacoepidemiology and Drug Safety.* 2007 Feb;16 (2):181-188. X-2, X-3.
1169. Klatte T, de Martino M, Arensmeier K, et al. Management and outcome of bilateral testicular germ cell tumors: a 25-year single center experience. *Int J Urol.* 2008 Sep;15(9):821-6. X-2, X-3.
1170. Kleiman SE, Yogev L, Gamzu R, et al. Genetic evaluation of infertile men. *Hum Reprod.* 1999 Jan;14(1):33-8. X-2, X-3.
1171. Klein FA, Whitmore WF, Jr., Sogani PC, et al. Inguinal lymph node metastases from germ cell testicular tumors. *J Urol.* 1984 Mar;131(3):497-500. X-2, X-3.
1172. Kleinschmidt K, Dieckmann KP, Georgiew A, et al. Chemotherapy is of limited efficacy in the control of contralateral testicular intraepithelial neoplasia in patients with testicular germ cell cancer. *Oncology.* 2009;77(1):33-9. X-2, X-3.
1173. Klepp O, Olsson AM, Ous S, et al. Early clinical stages of nonseminomatous testis cancer. Evaluation of the primary treatment and follow-up procedures of the SWENOTECA project. *Scand J Urol Nephrol.* 1991;25(3):179-90. X-2, X-3.
1174. Kliesch S, Bergmann M, Hertle L, et al. Semen parameters and testicular pathology in men with testicular cancer and contralateral carcinoma in situ or bilateral testicular malignancies. *Hum Reprod.* 1997 Dec;12(12):2830-5. X-2, X-3.
1175. Klin B, Lotan G, Efrati Y, et al. Acute idiopathic scrotal edema in children - Revisited. *Journal of Pediatric Surgery.* 2002;37 (8):1200-1202. X-2, X-3.
1176. Klin B, Zlotkevich L, Horne T, et al. A selective approach to the treatment of acute scrotum in children. *Pediatric Surgery International.* 1996 Aug;11 (7):483-486. X-2, X-3.
1177. Klocker H, Neuschmid-Kaspar F, Culig Z, et al. Androgen receptor alterations in patients with disturbances in male sexual development and in prostatic carcinoma. *Urol Int.* 1995;54(1):2-5. X-2, X-3.
1178. Klys HS, Whillis D, Howard G, et al. Glutathione S-transferase expression in the human testis and testicular germ cell neoplasia. *Br J Cancer.* 1992 Sep;66(3):589-93. X-2, X-3.
1179. Knight PJ and Vassy LE. The diagnosis and treatment of the acute scrotum in children and adolescents. *Annals of Surgery.* 1984;200 (5):664-673. X-2, X-3.
1180. Knoll LD. Use of porcine small intestinal submucosal graft in the surgical management of tunical deficiencies with penile prosthetic surgery. *Urology.* 2002 May;59(5):758-61. X-2, X-3.
1181. Knorr JR, Ragland RL, Brown RS, et al. Kallmann syndrome: MR findings. *American Journal of Neuroradiology.* 1993;14 (4):845-854. X-2, X-3.
1182. Knudtzon J and Aarskog D. 45,X/46,XY mosaicism. A clinical review and report of ten cases. *European Journal of Pediatrics.* 1987;146 (3):266-271. X-2, X-3.
1183. Ko YS, Lin LH and Chen DF. Abdominal teratomas in children. *Zhonghua Min Guo Xiao Er Ke Yi Xue Hui Za Zhi.* 1995 Sep-Oct;36(5):342-5. X-2, X-3.
1184. Kocak I, Yenisey C, Dundar M, et al. Relationship between seminal plasma interleukin-6 and tumor necrosis factor alpha levels with semen parameters in fertile and infertile men. *Urol Res.* 2002 Sep;30(4):263-7. X-2, X-3.
1185. Kocaoglu M, Bozlar U, Bulakbasi N, et al. Testicular microlithiasis in pediatric age group: Ultrasonography findings and literature review. *Diagnostic and Interventional Radiology.* 2005 Mar;11 (1):60-65. X-2, X-3.
1186. Kocvara R, Dolezal J, Hampel R, et al. Division of lymphatic vessels at varicocelectomy leads to testicular oedema and decline in testicular function according to the LH-RH analogue stimulation test. *Eur Urol.* 2003 Apr;43(4):430-5. X-2, X-3.
1187. Koff SA. Does compensatory testicular enlargement predict monorchism? *J Urol.* 1991 Aug;146(2 (Pt 2)):632-3. X-3.
1188. Koff SA and Sethi PS. Treatment of high undescended testes by low spermatic vessel ligation: an alternative to the Fowler-Stephens technique. *J Urol.* 1996 Aug;156(2 Pt 2):799-803; discussion 803. X-4, X-5, X-6.
1189. Kogan BA, Gupta R and Juenemann KP. Fertility in cryptorchidism: Improved timing of fixation and treatment in an experimental model. *Journal of Urology.* 1987;138 (4 II):1046-1047. X-3.
1190. Kogan SJ, Houman BZ, Reda EF, et al. Orchiopexy of the high undescended testis by division of the spermatic vessels: a critical review of 38 selected transections. *J Urol.* 1989 Jun;141(6):1416-9. X-4, X-5, X-6.
1191. Koh KBH. Beware the undescended testis and abdominal mass. *Australian and New Zealand Journal of Surgery.* 1996;66 (12):851-853. X-2, X-3.

1192. Koide O, Iwai S, Baba K, et al. Identification of testicular atypical germ cells by an immunohistochemical technique for placental alkaline phosphatase. *Cancer*. 1987 Sep 15;60(6):1325-30. X-2, X-3.
1193. Koivusalo A, Taskinen S and Rintala RJ. Cryptorchidism in boys with congenital abdominal wall defects. *Pediatr Surg Int*. 1998 Mar;13(2-3):143-5. X-2, X-3.
1194. Koizumi S, Shimizu H, Asami K, et al. Assessment of testicular biopsy after cessation of maintenance chemotherapy in childhood acute lymphoblastic leukemia: a report from the Children's Cancer and Leukemia Study Group. *Int J Hematol*. 1994 Aug;60(2):137-43. X-2, X-3.
1195. Kojima Y, Mizuno K, Imura M, et al. Laparoscopic orchiectomy and subsequent internal ring closure for extra-abdominal testicular nubbin in children. *Urology*. 2009 Mar;73(3):515-9; discussion 519-20. X-4, X-5, X-6.
1196. Kojima Y, Mizuno K, Kamisawa H, et al. Laparoscopic management of nonpalpable testis: New treatment strategy. *Journal of Endourology*. 2011 01 Apr;25 (4):635-640. X-4, X-5, X-6.
1197. Kojima Y, Mizuno K, Kohri K, et al. Advances in Molecular Genetics of Cryptorchidism. *Urology*. 2009 September;74 (3):571-578. X-1, X-2, X-3.
1198. Koksall IT, Ishak Y, Usta M, et al. Varicocele-induced testicular dysfunction may be associated with disruption of blood-testis barrier. *Arch Androl*. 2007 Jan-Feb;53(1):43-8. X-2, X-3.
1199. Koksall IT, Tefekli A, Usta M, et al. The role of reactive oxygen species in testicular dysfunction associated with varicocele. *BJU Int*. 2000 Sep;86(4):549-52. X-2, X-3.
1200. Kolligian ME, Kogan SJ and Beneck D. Intrascrotal hemangioendothelioma in infancy. *Urology*. 1997 Sep;50(3):456-8. X-2, X-3.
1201. Kolon TF, Clement MR, Cartwright L, et al. Transient asynchronous testicular growth in adolescent males with a varicocele. *J Urol*. 2008 Sep;180(3):1111-4; discussion 1114-5. X-2, X-3.
1202. Kolon TF, Wiener JS, Lewitton M, et al. Analysis of homeobox gene HOXA10 mutations in cryptorchidism. *Journal of Urology*. 1999 Jan;161 (1):275-280. X-3.
1203. Komatsuzaki S, Aoki Y, Niihori T, et al. Mutation analysis of the SHOC2 gene in Noonan-like syndrome and in hematologic malignancies. *J Hum Genet*. 2010 Dec;55(12):801-9. X-2, X-3.
1204. Kondo Y, Ishikawa T, Yamaguchi K, et al. Predictors of improved seminal characteristics by varicocele repair. *Andrologia*. 2009 Feb;41(1):20-3. X-2, X-3.
1205. Kondoh N, Koh E, Matsui T, et al. Improvement of semen characteristics after surgical repair of bilateral testicular varicocele as compared to unilateral varicocele patients. *Arch Androl*. 1990;24(1):61-7. X-2, X-3.
1206. Konstantinos S, Alevizos A, Anargiros M, et al. Association between testicular microlithiasis, testicular cancer, cryptorchidism and history of ascending testis. *Int Braz J Urol*. 2006 Jul-Aug;32(4):434-8; discussion 439. X-2, X-3.
1207. Koo H and Chi JG. Congenital hydrocephalus--analysis of 49 cases. *J Korean Med Sci*. 1991 Dec;6(4):287-98. X-2, X-3.
1208. Korde LA, Premkumar A, Mueller C, et al. Increased prevalence of testicular microlithiasis in men with familial testicular cancer and their relatives. *Br J Cancer*. 2008 Nov 18;99(10):1748-53. X-2, X-3.
1209. Kosan M, Gonulalan U, Ugurlu O, et al. Testicular microlithiasis in patients with scrotal symptoms and its relationship to testicular tumors. *Urology*. 2007 Dec;70(6):1184-6. X-2, X-3.
1210. Koscinski I, Wittemer C, Lefebvre-Khalil V, et al. Optimal management of extreme oligozoospermia by an appropriate cryopreservation programme. *Human Reproduction*. 2007 Oct;22 (10):2679-2684. X-2, X-3.
1211. Koumantakis E, Matalliotakis I, Kyriakou D, et al. Increased levels of interleukin-8 in human seminal plasma. *Andrologia*. 1998 Nov;30(6):339-43. X-2, X-3.
1212. Kovac V. Prevention of fertility disturbances in oncological male patients. *Radiology and Oncology*. 1996;30 (4):286-290. X-1, X-2, X-3.
1213. Kovachev LS. Possibilities of preperitoneal approach methods in the treatment of groin hernias. *Preperitoneal approach methods*. *Int Surg*. 1991 Jul-Sep;76(3):154-8. X-2, X-3.
1214. Kozina V, Geist D, Kubinova L, et al. Visualization of Reinke's crystals in normal and cryptorchid testis. *Histochemistry and Cell Biology*. 2011 February;135 (2):215-228. X-3.
1215. Kozminski M and Richards WH, 3rd. Fly-casting method of intracorporeal laparoscopic knot tying. *Urology*. 1994 Oct;44(4):577-8. X-3, X-4, X-5, X-6.
1216. Kratzer SS, Ulbright TM, Talerman A, et al. Large cell calcifying sertoli cell tumor of the testis: Contrasting features of six malignant and six benign tumors and a review of the literature. *American Journal of Surgical Pathology*. 1997;21 (11):1271-1280. X-2, X-3.
1217. Krieger NR, Shochat SJ, McGowan V, et al. Early hernia repair in the premature infant: long-term follow-up. *J Pediatr Surg*. 1994 Aug;29(8):978-81; discussion 981-2. X-2, X-3.
1218. Kristianslund S, Fossa SD and Kjellevoid K. Bilateral malignant testicular germ cell cancer. *Br J Urol*. 1986 Feb;58(1):60-3. X-2, X-3.
1219. Kroovand RL, Al-Ansari RM and Perlmutter AD. Urethral and genital malformations in prune belly syndrome. *J Urol*. 1982 Jan;127(1):94-6. X-2, X-3.
1220. Krstic ZD. Modified orchiopexy: a "real dartos pocket". *Eur J Pediatr Surg*. 1995 Apr;5(2):106-9. X-4, X-5, X-6.
1221. Kruse R, Schuppe HC, Malms J, et al. Anti-inflammatory and varicocele treatment in nonobstructive azoospermia. *Andrologia*. 2003 Aug;35 (4):217-219. X-2, X-3.

1222. Ku JH, Kim YH, Jeon YS, et al. The preventive effect of systemic treatment with interferon-alpha2B for infertility from mumps orchitis. *BJU Int.* 1999 Nov;84(7):839-42. X-2, X-3.
1223. Ku JH, Son H, Kwak C, et al. Impact of varicocele on testicular volume in young men: significance of compensatory hypertrophy of contralateral testis. *J Urol.* 2002 Oct;168(4 Pt 1):1541-4. X-2, X-3.
1224. Kuber W. Testicular tumor and cryptorchidism. *Eur Urol.* 1982;8(5):280-3. X-2, X-3.
1225. Kuber W, Kratzik C, Schwarz HP, et al. Experience with beta-HCG-positive seminoma. *Br J Urol.* 1983 Oct;55(5):555-9. X-2, X-3.
1226. Kuber W, Viehberger G, Zeillinger R, et al. Effects of the duration of therapy with the LHRH agonist D-ser (BUT)6 Azgly10-LHRH (ICI 118-630) on the steroid hormone content and the morphology of human testicular tissue in the treatment of patients with advanced prostate cancer. *Urol Res.* 1991;19(1):19-24. X-2, X-3.
1227. Kubota M, Okuyama N, Yamazaki S, et al. Is mobile testis a true pathological condition due to a gubernaculum abnormality? *Pediatr Surg Int.* 2007 Jul;23(7):633-6. X-3, X-4, X-5, X-6.
1228. Kucukaydin M, Ozokutan BH, Turan C, et al. Malformation of the epididymis in undescended testis. *Pediatr Surg Int.* 1998 Dec;14(3):189-91. X-4, X-5, X-6.
1229. Kuenkel MR and Korth K. Rationale for antegrade sclerotherapy in varicoceles. *Eur Urol.* 1995;27(1):13-7. X-2, X-3.
1230. Kugelman A, Tubi A, Bader D, et al. Pre-auricular tags and pits in the newborn: The role of renal ultrasonography. *Journal of Pediatrics.* 2002 Sep;141 (3):388-391. X-2, X-3.
1231. Kuhn JM, Mahoudeau JA, Billaud L, et al. Evaluation of diagnostic criteria for Leydig cell tumours in adult men revealed by gynaecomastia. *Clin Endocrinol (Oxf).* 1987 Apr;26(4):407-16. X-2, X-3.
1232. Kuligowska E, Baker CE and Oates RD. Male infertility: role of transrectal US in diagnosis and management. *Radiology.* 1992 Nov;185(2):353-60. X-2, X-3.
1233. Kulkarni BK, Oak SN, Patel MP, et al. Developmental anomalies associated with hypospadias. *J Postgrad Med.* 1991 Jul;37(3):140-3. X-2, X-3.
1234. Kulkarni JN, Desai SM, Phadke GK, et al. Improved management of abdominal undescended testicular tumors with bulky confluent retroperitoneal nodal metastases. *J Urol.* 1996 Oct;156(4):1341-4. X-2, X-3.
1235. Kulkarni JN and Kamat MR. Tumors in undescended testis. *J Surg Oncol.* 1991 Apr;46(4):257-60. X-2, X-3.
1236. Kumagai J, Hsu SY, Matsumi H, et al. INSL3/Leydig insulin-like peptide activates the LGR8 receptor important in testis descent. *Journal of Biological Chemistry.* 2002 30 Aug;277 (35):31283-31286. X-2, X-3.
1237. Kumar D, Bremner DN and Brown PW. Fertility after orchiopexy for cryptorchidism: a new approach to assessment. *Br J Urol.* 1989 Nov;64(5):516-20. X-3, X-4, X-5, X-6.
1238. Kumar P, Kun LE, Hustu HO, et al. Survival outcome following isolated central nervous system relapse treated with additional chemotherapy and craniospinal irradiation in childhood acute lymphoblastic leukemia. *Int J Radiat Oncol Biol Phys.* 1995 Feb 1;31(3):477-83. X-2, X-3.
1239. Kumar PA, Pitteloud N, Andrews PA, et al. Testis morphology in patients with idiopathic hypogonadotropic hypogonadism. *Hum Reprod.* 2006 Apr;21(4):1033-40. X-2, X-3.
1240. Kumar PV. Testicular leukemia relapse. Fine needle aspiration findings. *Acta Cytol.* 1998 Mar-Apr;42(2):312-6. X-2, X-3.
1241. Kumar PV, Owji SM and Khezri AA. Tuberculous orchitis diagnosed by fine needle aspiration cytology. *Acta Cytol.* 1996 Nov-Dec;40(6):1253-6. X-2, X-3.
1242. Kumar R, Gautam G, Gupta NP, et al. Role of testicular fine-needle aspiration cytology in infertile men with clinically obstructive azoospermia. *Natl Med J India.* 2006 Jan-Feb;19(1):18-20. X-2, X-3.
1243. Kumar RK, Shi EC and Duffy B. Cisapride and caesarean section: their role in babies with gastroschisis. *J Paediatr Child Health.* 1999 Apr;35(2):181-4. X-2, X-3.
1244. Kunej T, Zorn B and Peterlin B. Y chromosome microdeletions in infertile men with cryptorchidism. *Fertil Steril.* 2003 Jun;79 Suppl 3:1559-65. X-3.
1245. Kung AW, Zhong YY, Lam KS, et al. Induction of spermatogenesis with gonadotrophins in Chinese men with hypogonadotropic hypogonadism. *Int J Androl.* 1994 Oct;17(5):241-7. X-2, X-3.
1246. Kuo JY, Huang WJ, Chiu AW, et al. Clinical experiences of germ cell tumor in cryptorchid testis. *Kaohsiung J Med Sci.* 1999 Jan;15(1):32-7. X-2, X-3.
1247. Kupeli S, Arikan N, Aydos K, et al. Multiparametric evaluation of testicular atrophy due to varicocele. *Urol Int.* 1991;46(2):189-92. X-2, X-3.
1248. Kurahashi N, Kasai S, Shibata T, et al. Parental and neonatal risk factors for cryptorchidism. *Med Sci Monit.* 2005 Jun;11(6):CR274-283. X-3, X-4, X-5, X-6.
1249. Kurien A, Mammen K and Jacob S. Role of fine needle aspiration cytology (FNAC) of testes in male infertility. *Indian Journal of Urology.* 2003 Apr;19 (2):140-144. X-2, X-3.
1250. Kuroiwa T, Hasuo K, Yasumori K, et al. Transcatheter embolization of testicular vein for varicocele testis. *Acta Radiol.* 1991 Jul;32(4):311-4. X-2, X-3.
1251. Kurpisz M, Kasprzak M and Mazurkiewicz I. The easy formation of antisperm antibodies in prepubertal boys and the difficult humoral response in severe-combined immunodeficiency mice. *Fertil Steril.* 1996 Nov;66(5):805-8. X-2, X-3.

1252. Kursh ED. What is the incidence of varicocele in a fertile population? *Fertil Steril.* 1987 Sep;48(3):510-1. X-2, X-3.
1253. Kuypers P, Kang N and Ellis H. Valveless testicular veins: A possible etiological factor in varicocele. *Clinical Anatomy.* 1992;5 (2):113-118. X-2, X-3.
1254. Kvist E, Gyrtrup JH, Mejdahl S, et al. Outpatient orchiopexy and herniotomy in children. *Acta Paediatr Scand.* 1989 Sep;78(5):754-8. X-4, X-5, X-6.
1255. Kvist K, Thorup J, Byskov AG, et al. Cryopreservation of intact testicular tissue from boys with cryptorchidism. *Hum Reprod.* 2006 Feb;21(2):484-91. X-3.
1256. Kwon EO, Pareek G, Fracchia JA, et al. Scrotal reconstruction using rapid intraoperative tissue expansion: a preliminary report. *J Urol.* 2008 Jan;179(1):207-9. X-2, X-3.
1257. La Scala GC and Ein SH. Retractable testes: an outcome analysis on 150 patients. *J Pediatr Surg.* 2004 Jul;39(7):1014-7. X-3.
1258. La Vignera S, Calogero AE, Condorelli R, et al. Cryptorchidism and its long-term complications. *Eur Rev Med Pharmacol Sci.* 2009 Sep-Oct;13(5):351-6. X-3.
1259. Laberge JM, Nguyen LT, Homsy YL, et al. Bilateral Wilms' tumors: Changing concepts in management. *Journal of Pediatric Surgery.* 1987;22 (8):730-735. X-3.
1260. Lacerda HM, Richiardi L, Pettersson A, et al. Cancer risk in mothers of men operated for undescended testis. *PLoS ONE.* 2010;5 (12) (pp 1-4)(e14285). X-3.
1261. Lackgren G and Ploen L. The morphology of the human undescended testis with special reference to the Sertoli cell and puberty. *Int J Androl.* 1984 Feb;7(1):23-38. X-3, X-4, X-5, X-6.
1262. Lackner J, Schatzl G, Koller A, et al. Treatment of testicular cancer: influence on pituitary-gonadal axis and sexual function. *Urology.* 2005 Aug;66(2):402-6. X-2, X-3.
1263. Lackner JE, Mark I, Schatzl G, et al. Hypogonadism and androgen deficiency symptoms in testicular cancer survivors. *Urology.* 2007 Apr;69(4):754-8. X-2, X-3.
1264. Laghari AA and Jamal A. Evaluation of morbidity and recurrence in bilateral repair of inguinal hernias. *Journal of the College of Physicians and Surgeons Pakistan.* 1999;9 (8):371-373. X-2, X-3.
1265. Lagmay J, Termuhlen A, Fung B, et al. Primary testicular presentation of ALK-1-negative anaplastic large cell lymphoma in a pediatric patient. *J Pediatr Hematol Oncol.* 2009 May;31(5):330-2. X-2, X-3.
1266. Lahdenne P, Dunkel L, Heikinheimo M, et al. Hypergonadotropic hypogonadism and sperm abnormalities in men born with benign sacrococcygeal teratoma. *Journal of Andrology.* 1991;12 (4):226-230. X-2, X-3.
1267. Lai PP, Bernstein MJ, Kim H, et al. Radiation therapy for stage I and IIA testicular seminoma. *Int J Radiat Oncol Biol Phys.* 1994 Jan 15;28(2):373-9. X-2, X-3.
1268. Lais A and Ferro F. Trans-scrotal approach for surgical correction of cryptorchidism and congenital anomalies of the processus vaginalis. *Eur Urol.* 1996;29(2):235-8; discussion 238-9. X-4, X-5, X-6.
1269. Lal A, Kwan E, al Mahr M, et al. Molecular detection of acute lymphoblastic leukaemia in boys with testicular relapse. *Mol Pathol.* 1998 Oct;51(5):277-81. X-2, X-3.
1270. Lamesch AJ. Monorchidism or unilateral anorchidism. *Langenbecks Arch Chir.* 1994;379(2):105-8. X-2, X-3.
1271. Laor E, Fisch H, Tennenbaum S, et al. Unilateral testicular torsion: abnormal histological findings in the contralateral testis--cause or effect? *Br J Urol.* 1990 May;65(5):520-3. X-2, X-3.
1272. Laron Z, Arad J, Gurewitz R, et al. Age at first conscious ejaculation: a milestone in male puberty. *Helv Paediatr Acta.* 1980 Mar;35(1):13-20. X-2, X-3.
1273. Laron Z, Dickerman Z, Ritterman I, et al. Follow-up of boys with unilateral compensatory testicular hypertrophy. *Fertil Steril.* 1980 Mar;33(3):297-301. X-2, X-3.
1274. Larsen HP, Thorup J, Skovgaard LT, et al. Long-term cultures of testicular biopsies from boys with cryptorchidism: effect of FSH and LH on the number of germ cells. *Hum Reprod.* 2002 Feb;17(2):383-9. X-4, X-5, X-6.
1275. Larsson LT and Kullendorff CM. Late surgical problems in children born with abdominal wall defects. *Ann Chir Gynaecol.* 1990;79(1):23-5. X-2, X-3.
1276. Law GS, Perez LM and Joseph DB. Two-stage Fowler-Stephens orchiopexy with laparoscopic clipping of the spermatic vessels. *J Urol.* 1997 Sep;158(3 Pt 2):1205-7. X-4, X-5, X-6.
1277. Law H, Mushtaq I, Williams S, et al. Risk of germ cell malignancy in children with XY intersex versus isolated cryptorchidism by immunohistochemistry. *Fetal Pediatr Pathol.* 2006 Mar-Apr;25(2):95-105. X-2, X-3.
1278. Law H, Mushtaq I, Wingrove K, et al. Histopathological features of testicular regression syndrome: relation to patient age and implications for management. *Fetal Pediatr Pathol.* 2006 Mar-Apr;25(2):119-29. X-2, X-3.
1279. Le Coultre C, Cuendet A and Richon J. Frequency of testicular atrophy following incarcerated hernia. *Z Kinderchir.* 1983 Apr;38 Suppl:39-41. X-2, X-3.
1280. Lebed B, Packer M, Husmann D, et al. Results and complications of adolescent varicocele repair with intraoperative sodium morrhuate sclerotherapy. *J Urol.* 2008 Oct;180(4 Suppl):1837-41. X-2, X-3.
1281. LeBlanc E, Caty A, Dargent D, et al. Extraperitoneal laparoscopic para-aortic lymph node dissection for early stage nonseminomatous germ cell tumors of the testis with introduction of a nerve sparing technique: description and results. *J Urol.* 2001 Jan;165(1):89-92. X-2, X-3.

1282. Lechter A, Lopez G, Martinez C, et al. Anatomy of the gonadal veins: A reappraisal. *Surgery*. 1991;109(6):735-739. X-1, X-2, X-3.
1283. Lee A, Park SJ, Lee HK, et al. Acute idiopathic scrotal edema: ultrasonographic findings at an emergency unit. *Eur Radiol*. 2009 Aug;19(8):2075-80. X-2, X-3.
1284. Lee CF, Lin PY, Chen IH, et al. Microsurgical subinguinal varicocelectomy-An experience of 327 operations in 224 patients. *Urological Science*. 2010 March;21 (1):30-37. X-2, X-3.
1285. Lee CH and Dellon AL. Surgical management of groin pain of neural origin. *J Am Coll Surg*. 2000 Aug;191(2):137-42. X-2, X-3.
1286. Lee CT, Thirumoorthy T, Lim KB, et al. Epidemiology of acute epididymo-orchitis in Singapore. *Ann Acad Med Singapore*. 1989 May;18(3):320-3. X-2, X-3.
1287. Lee GH and Cohen AJ. CT imaging of abdominal hernias. *AJR Am J Roentgenol*. 1993 Dec;161(6):1209-13. X-2, X-3.
1288. Lee JS, Park HJ and Seo JT. What is the indication of varicocelectomy in men with nonobstructive azoospermia? *Urology*. 2007 Feb;69(2):352-5. X-2, X-3.
1289. Lee KF, Tam YT, Zuo Y, et al. Characterization of an acrosome protein VAD1.2/AEP2 which is differentially expressed in spermatogenesis. *Mol Hum Reprod*. 2008 Aug;14(8):465-74. X-2, X-3.
1290. Lee LM, Johnson HW and McLoughlin MG. Microdissection and radiographic studies of the arterial vasculature of the human testes. *J Pediatr Surg*. 1984 Jun;19(3):297-301. X-2, X-3.
1291. Lee LM, Wright JE and McLoughlin MG. Testicular torsion in the adult. *J Urol*. 1983 Jul;130(1):93-4. X-1, X-2, X-3.
1292. Lee RK, Li PS and Goldstein M. Simultaneous vasectomy and varicocelectomy: indications and technique. *Urology*. 2007 Aug;70(2):362-5. X-2, X-3.
1293. Leenen AS and Riebel TW. Testicular microlithiasis in children: sonographic features and clinical implications. *Pediatr Radiol*. 2002 Aug;32(8):575-9. X-2, X-3.
1294. Leeners B, Sauer I, Schefels J, et al. Prune-belly syndrome: Therapeutic options including in utero placement of a vesicoamniotic shunt. *Journal of Clinical Ultrasound*. 2000;28 (9):500-507. X-2, X-3.
1295. Legare C, Thabet M and Sullivan R. Expression of heat shock protein 70 in normal and cryptorchid human excurrent duct. *Mol Hum Reprod*. 2004 Mar;10(3):197-202. X-2, X-3.
1296. Leibl BJ, Kraft B, Redecke JD, et al. Are postoperative complaints and complications influenced by different techniques in fashioning and fixing the mesh in transperitoneal laparoscopic hernioplasty? Results of a prospective randomized trial. *World J Surg*. 2002 Dec;26(12):1481-4. X-2, X-3.
1297. Lemack GE, Uzzo RG, Schlegel PN, et al. Microsurgical repair of the adolescent varicocele. *J Urol*. 1998 Jul;160(1):179-81. X-2, X-3.
1298. Lemcke B, Zentgraf J, Behre HM, et al. Long-term effects on testicular function of high-dose testosterone treatment for excessively tall stature. *J Clin Endocrinol Metab*. 1996 Jan;81(1):296-301. X-2, X-3.
1299. Lenz S, Giwercman A, Elsborg A, et al. Ultrasonic testicular texture and size in 444 men from the general population: correlation to semen quality. *Eur Urol*. 1993;24(2):231-8. X-2, X-3.
1300. Lenz S, Skakkebaek NE and Hertel NT. Abnormal ultrasonic pattern in contralateral testes in patients with unilateral testicular cancer. *World J Urol*. 1996;14 Suppl 1:S55-8. X-2, X-3.
1301. Lerchl A, Keck C, Spiteri-Grech J, et al. Diurnal variations in scrotal temperature of normal men and patients with varicocele before and after treatment. *Int J Androl*. 1993 Jun;16(3):195-200. X-2, X-3.
1302. Leroy X, Rigot JM, Aubert S, et al. Value of frozen section examination for the management of nonpalpable incidental testicular tumors. *Eur Urol*. 2003 Oct;44(4):458-60. X-2, X-3.
1303. Leung WY, Poon M, Fan TW, et al. Testicular volume of boys after inguinal herniotomy: combined clinical and radiological follow-up. *Pediatr Surg Int*. 1999;15(1):40-1. X-2, X-3.
1304. Levalle OA, Zylbersztein C, Aszpis S, et al. Serum luteinizing hormone pulsatility and intratesticular testosterone and oestradiol concentrations in idiopathic infertile men with high and normal follicle stimulating hormone serum concentrations. *Hum Reprod*. 1994 May;9(5):781-7. X-2, X-3.
1305. Levard G and Laberge JM. The fate of undescended testes in patients with gastroschisis. *Eur J Pediatr Surg*. 1997 Jun;7(3):163-5. X-4, X-5, X-6.
1306. Levine LA and Matkov TG. Microsurgical denervation of the spermatic cord as primary surgical treatment of chronic orchialgia. *J Urol*. 2001 Jun;165(6 Pt 1):1927-9. X-2, X-3.
1307. Levine LA, Matkov TG and Lubenow TR. Microsurgical denervation of the spermatic cord: a surgical alternative in the treatment of chronic orchialgia. *J Urol*. 1996 Mar;155(3):1005-7. X-2, X-3.
1308. Levinger U, Gornish M, Gat Y, et al. Is varicocele prevalence increasing with age? *Andrologia*. 2007 Jun;39(3):77-80. X-1, X-2, X-3.
1309. Levy HL, Vargas JE, Waisbren SE, et al. Reproductive fitness in maternal homocystinuria due to cystathionine beta-synthase deficiency. *J Inherit Metab Dis*. 2002 Aug;25(4):299-314. X-2, X-3.
1310. Lewin LM, Shalev DP, Weissenberg R, et al. Carnitine and acylcarnitines in semen from azoospermic patients. *Fertil Steril*. 1981 Aug;36(2):214-8. X-2, X-3.
1311. Lewis RW and Garcia RR. The results of epididymal ablation by sclerosing agents in the nonhuman primate. *Fertil Steril*. 1984 Mar;41(3):465-9. X-2, X-3.

1312. Ley SB and Leonard JM. Male hypogonadotropic hypogonadism: factors influencing response to human chorionic gonadotropin and human menopausal gonadotropin, including prior exogenous androgens. *J Clin Endocrinol Metab.* 1985 Oct;61(4):746-52. X-2, X-3.
1313. Li X, Nokkala E, Yan W, et al. Altered structure and function of reproductive organs in transgenic male mice overexpressing human aromatase. *Endocrinology.* 2001 Jun;142(6):2435-42. X-2, X-3.
1314. Li X, Strauss L, Makela S, et al. Multiple structural and functional abnormalities in the p450 aromatase expressing transgenic male mice are ameliorated by a p450 aromatase inhibitor. *Am J Pathol.* 2004 Mar;164(3):1039-48. X-2, X-3.
1315. Li YX, Coucke PA, Qian TN, et al. Clinical characteristics, prognosis, and treatment of pelvic cryptorchid seminoma. *Int J Radiat Oncol Biol Phys.* 1997 May 1;38(2):351-7. X-2, X-3.
1316. Li YX, Coucke PA, Qian TN, et al. Seminoma arising in corrected and uncorrected inguinal cryptorchidism: treatment and prognosis in 66 patients. *Int J Radiat Oncol Biol Phys.* 1997 May 1;38(2):343-50. X-2, X-3.
1317. Libman JL, Segal R, Baazeem A, et al. Microanatomy of the left and right spermatic cords at subinguinal microsurgical varicocelectomy: comparative study of primary and redo repairs. *Urology.* 2010 Jun;75(6):1324-7. X-2, X-3.
1318. Liebert PS. Undescended testis - Evaluation and treatment. *Emergency and Office Pediatrics.* 1994;7 (4):95-97. X-1.
1319. Lien HH and Talle K. Normal and anomalous structures simulating retroperitoneal lymphadenopathy at computed tomography. *Acta Radiol.* 1988 Jul-Aug;29(4):385-90. X-3, X-4, X-5, X-6.
1320. Lim DJ, Liu XL, Sutkowski DM, et al. Growth of an androgen-sensitive human prostate cancer cell line, LNCaP, in nude mice. *Prostate.* 1993;22(2):109-18. X-2, X-3.
1321. Lim HN, Hughes IA and Ross Hawkins J. Clinical and molecular evidence for the role of androgens and WT1 in testis descent. *Molecular and Cellular Endocrinology.* 2001 20 Dec;185 (1-2):43-50. X-3.
1322. Lim HN, Nixon RM, Chen H, et al. Evidence that longer androgen receptor polyglutamine repeats are a causal factor for genital abnormalities. *J Clin Endocrinol Metab.* 2001 Jul;86(7):3207-10. X-2, X-3.
1323. Lim SM. Surgery in transsexuals. *Ann Acad Med Singapore.* 1986 Jan;15(1):122-6. X-2, X-3.
1324. Lima M, Tursini S, Ruggeri G, et al. Laparoscopically assisted anorectal pull-through for high imperforate anus: three years' experience. *J Laparoendosc Adv Surg Tech A.* 2006 Feb;16(1):63-6. X-2, X-3.
1325. Lima Neto EV, Goldenberg A and Juca MJ. Prospective study on the effects of a polypropylene prosthesis on testicular volume and arterial flow in patients undergoing surgical correction for inguinal hernia. *Acta Cir Bras.* 2007 Jul-Aug;22(4):266-71. X-2, X-3.
1326. Lin ADY, Levin RM, Kogan BA, et al. Alteration of contractile and regulatory proteins in estrogen-induced hypertrophy of female rabbit bladder. *Urology.* 2006 Dec;68 (5):1139-1143. X-2, X-3.
1327. Lin AE, Singh KE, Strauss A, et al. An additional patient with mycophenolate mofetil embryopathy: Cardiac and facial analyses. *American Journal of Medical Genetics, Part A.* 2011 April;155 (4):748-756. X-2, X-3.
1328. Lin BJ, Chen KK, Chen MT, et al. The time for serum testosterone to reach castrate level after bilateral orchiectomy or oral estrogen in the management of metastatic prostatic cancer. *Urology.* 1994 Jun;43(6):834-7. X-2, X-3.
1329. Lin HY, Lin SP, Chen YJ, et al. Clinical characteristics and survival of trisomy 13 in a medical center in Taiwan, 1985-2004. *Pediatr Int.* 2007 Jun;49(3):380-6. X-2, X-3.
1330. Lin WW, Kim ED, Quesada ET, et al. Unilateral testicular injury from external trauma: evaluation of semen quality and endocrine parameters. *J Urol.* 1998 Mar;159(3):841-3. X-2, X-3.
1331. Lin YM, Hsu CC, Wu MH, et al. Successful testicular sperm extraction and paternity in an azoospermic man after bilateral postpubertal orchiopexy. *Urology.* 2001 Feb;57(2):365. X-4, X-5, X-6.
1332. Lindhagen J, Nilsson S, Seeman T, et al. Torsion of the testis--a misinterpreted diagnosis in the young adult. *Ann Chir Gynaecol.* 1980;69(4):157-60. X-2, X-3.
1333. Linke J, Loy V and Dieckmann KP. Prevalence of testicular intraepithelial neoplasia in healthy males. *J Urol.* 2005 May;173(5):1577-9. X-2, X-3.
1334. Lischka A, Herkner K and Pollak A. Diagnosis of peripheral androgen insensitivity in a male infant excretion analysis. *Arch Androl.* 1989;22(2):143-7. X-3.
1335. Little SE, Hanks SP, King-Underwood L, et al. Frequency and heritability of WT1 mutations in nonsyndromic Wilms' tumor patients: a UK Children's Cancer Study Group Study. *J Clin Oncol.* 2004 Oct 15;22(20):4140-6. X-2, X-3.
1336. Liu KKW and Leung MWY. Update on the management of common urological problems in children. *Hong Kong Practitioner.* 2005 Feb;27 (2):53-60. X-1, X-2, X-3.
1337. Liu RS, Chen YK, Hsu HS, et al. Reappraisal of scrotal scintigraphy in evaluation of varicoceles. *Nucl Med Commun.* 1994 Jul;15(7):540-4. X-2, X-3.
1338. Liu TC and Qiu JS. Pathological findings on peripheral nerves, lymph nodes, and visceral organs of leprosy. *Int J Lepr Other Mycobact Dis.* 1984 Sep;52(3):377-83. X-2, X-3.
1339. Livne PM, Savir A and Servadio C. Re-orchiopexy: advantages and disadvantages. *Eur Urol.* 1990;18(2):137-9. X-4, X-5, X-6.

1340. Lizza EF, Marmar JL and Schmidt SS. Transseptal crossed vasovasostomy. *Journal of Urology*. 1985;134(6):1131-1132. X-2, X-3.
1341. Lloyd-Lavery A, Ali I, Espinosa O, et al. *British Journal of Dermatology*. [Conference Abstract]. 2009 July; Conference: British Association of Dermatologists 89th Annual Meeting Glasgow United Kingdom. Conference Start: 20090707 Conference End: 20090710. Conference: British Association of Dermatologists 89th Annual Meeting Glasgow United Kingdom. Conference Start: 20090707 Conference End: 20090710. Conference Publication: (var.pagings). 161:51. X-2, X-3.
1342. Lobaccaro JM, Medlej R, Berta P, et al. PCR analysis and sequencing of the SRY sex determining gene in four patients with bilateral congenital anorchia. *Clin Endocrinol (Oxf)*. 1993 Feb;38(2):197-201. X-3.
1343. Lobo MV, Arenas MI, Alonso FJ, et al. Nestin, a neuroectodermal stem cell marker molecule, is expressed in Leydig cells of the human testis and in some specific cell types from human testicular tumours. *Cell Tissue Res*. 2004 Jun;316(3):369-76. X-2, X-3.
1344. Loftus BM, Gilmartin LG, O'Brien MJ, et al. Intratubular germ cell neoplasia of the testis: identification by placental alkaline phosphatase immunostaining and argyrophilic nucleolar organizer region quantification. *Hum Pathol*. 1990 Sep;21(9):941-8. X-2, X-3.
1345. Londergan TA, Hochman HI and Goldberger N. Postoperative pain following outpatient pediatric urologic surgery: A comparison of anesthetic techniques. *Urology*. 1994;44(4):572-576. X-2, X-3.
1346. Looijenga LH, de Leeuw H, van Oorschot M, et al. Stem cell factor receptor (c-KIT) codon 816 mutations predict development of bilateral testicular germ-cell tumors. *Cancer Res*. 2003 Nov 15;63(22):7674-8. X-2, X-3.
1347. Looijenga LHJ, Hersmus R, De Leeuw BHCGM, et al. Gonadal tumours and DSD. *Best Practice and Research: Clinical Endocrinology and Metabolism*. 2010;24(2):291-310. X-3.
1348. Lopez Teijon M, Garcia F, Serra O, et al. Semen quality in a population of volunteers from the province of Barcelona. *Reprod Biomed Online*. 2007 Oct;15(4):434-44. X-2, X-3.
1349. Lorenzi P, Spicher VM, Laubereau B, et al. Antiretroviral therapies in pregnancy: maternal, fetal and neonatal effects. Swiss HIV Cohort Study, the Swiss Collaborative HIV and Pregnancy Study, and the Swiss Neonatal HIV Study. *AIDS*. 1998 Dec 24;12(18):F241-7. X-2, X-3.
1350. Lothe RA, Heimdal K, Lier ME, et al. High resolution chromosome banding in search of germ line mutations applied on testicular cancer patients. *Cancer Genet Cytogenet*. 1992 Mar;59(1):62-7. X-2, X-3.
1351. Loughlin KR. Complications of vasovasostomy. *Urol Clin North Am*. 1988 May;15(2):243-8. X-2, X-3.
1352. Loy V and Dieckmann KP. Prevalence of contralateral testicular intraepithelial neoplasia (carcinoma in situ) in patients with testicular germ cell tumour. Results of the German multicentre study. *Eur Urol*. 1993;23(1):120-2. X-2, X-3.
1353. Ludwig AK, Katalinic A, Thyen U, et al. Physical health at 5.5 years of age of term-born singletons after intracytoplasmic sperm injection: results of a prospective, controlled, single-blinded study. *Fertil Steril*. 2009 Jan;91(1):115-24. X-2, X-3.
1354. Lugo Vicente HL. The pediatric inguinal hernia: is contralateral exploration justified? *Bol Asoc Med P R*. 1995 Jan-Feb;87(1-2):8-11. X-2, X-3.
1355. Luk JM, Lee NPY, Shum CK, et al. Acrosome-specific gene AEP1: Identification, characterization and roles in spermatogenesis. *Journal of Cellular Physiology*. 2006 Dec;209(3):755-766. X-2, X-3.
1356. Luks FI, Hansbrough F, Klotz DH, Jr., et al. Early gender assignment in true hermaphroditism. *J Pediatr Surg*. 1988 Dec;23(12):1122-6. X-2, X-3.
1357. Lukusa T, Fryns JP, Kleczkowska A, et al. Role of gonadal dysgenesis in gonadoblastoma induction in 46, XY individuals. The Leuven experience in 46, XY pure gonadal dysgenesis and testicular feminization syndromes. *Genet Couns*. 1991;2(1):9-16. X-2, X-3.
1358. Lund DP, Mitchell J, Kharasch V, et al. Congenital diaphragmatic hernia: the hidden morbidity. *J Pediatr Surg*. 1994 Feb;29(2):258-62; discussion 262-4. X-2, X-3.
1359. Lund L, Tang YC, Roebuck D, et al. Testicular catch-up growth after varicocele correction in adolescents. *Pediatr Surg Int*. 1999;15(3-4):234-7. X-2, X-3.
1360. Lundsberg LS, Bracken MB and Belanger K. Occupationally related magnetic field exposure and male subfertility. *Fertil Steril*. 1995 Feb;63(2):384-91. X-2, X-3.
1361. Lupien M, Dievart A, Morales CR, et al. Expression of constitutively active Notch1 in male genital tracts results in ectopic growth and blockage of efferent ducts, epididymal hyperplasia and sterility. *Dev Biol*. 2006 Dec 15;300(2):497-511. X-2, X-3.
1362. Luque Mialdea R, Sanabia J, Martin Crespo R, et al. Microsurgical treatment of varicocele in adolescents. *Eur J Pediatr Surg*. 1995 Apr;5(2):101-3. X-2, X-3.
1363. Lykkesfeldt G, Hoyer H, Ibsen HH, et al. Steroid sulphatase deficiency disease. *Clin Genet*. 1985 Sep;28(3):231-7. X-2, X-3.
1364. Lynch DF, Jr. and Richie JP. Supraclavicular node biopsy in staging testis tumors. *J Urol*. 1980 Jan;123(1):39-40. X-2, X-3.
1365. Lyon RP, Marshall S and Scott MP. Varicocele in childhood and adolescence: implication in adulthood infertility? *Urology*. 1982 Jun;19(6):641-4. X-2, X-3.

1366. Lyon RP, Marshall S and Scott MP. Varicocele in youth. *West J Med.* 1983 Jun;138(6):832-4. X-2, X-3.
1367. Ma SZ, Li XH and Hu J. Acellular extracellular matrix for inguinal hernia repair. *Hernia.* 2006 Jun;10 (3):229-231. X-2, X-3.
1368. Ma T, Guo J, Yang W, et al. Testicular cancer in patients after treatment of cryptorchidism. *Chinese-German Journal of Clinical Oncology.* 2011 January;10 (1):40-42. X-4, X-5, X-6.
1369. MacMahon RA and Cussen LJ. Detection of gonadal carcinoma in situ in childhood and implications for management. *Aust N Z J Surg.* 1991 Sep;61(9):667-9. X-3.
1370. MacMahon RA and Cussen LJ. Unilateral enlargement of the testis in childhood: does it need exploration? *J Pediatr Surg.* 1991 Jan;26(1):68-9. X-2, X-3.
1371. Madgar I, Seidman DS, Levran D, et al. Micromanipulation improves in-vitro fertilization results after epididymal or testicular sperm aspiration in patients with congenital absence of the vas deferens. *Hum Reprod.* 1996 Oct;11(10):2151-4. X-2, X-3.
1372. Maghsoudi H and Pourzand A. Giant prosthetic reinforcement of the visceral sac: the Stoppa groin hernia repair in 234 patients. *Ann Saudi Med.* 2005 May-Jun;25(3):228-32. X-2, X-3.
1373. Magid MS, Ma ZW, Girardi SK, et al. The acid-fast stain is a superior stain for use in the mean mature spermatid count for testicular biopsies. *J Androl.* 1998 May-Jun;19(3):261-5. X-2, X-3.
1374. Magoha GA. Testicular cancer in Nigerians. *East Afr Med J.* 1995 Sep;72(9):554-6. X-2, X-3.
1375. Mahafza WS, Haroun AA, Al-Hadidy AM, et al. Testicular microlithiasis in patients with varicocele: A prospective study. *Journal of the Bahrain Medical Society.* 2007 October;19 (4):137-141. X-3, X-4, X-5, X-6.
1376. Mahmoud AM, Comhaire FH, Vereecken A, et al. Inhibition and steroid response to testicular stimulation with pulse FSH (Metrodin) in infertile men with unilateral cryptorchidism. *Andrologia.* 1996;28 (2):103-108. X-2.
1377. Mahmoud AM, Goemaere S, El-Garem Y, et al. Testicular volume in relation to hormonal indices of gonadal function in community-dwelling elderly men. *J Clin Endocrinol Metab.* 2003 Jan;88(1):179-84. X-2, X-3.
1378. Mahmoud AM, Tuytens CL and Comhaire FH. Clinical and biological aspects of male immune infertility: A case- controlled study of 86 cases. *Andrologia.* 1996;28 (4):191-196. X-2, X-3.
1379. Mahomed AA and McLean V. Cost analysis of minimally invasive surgery in a pediatric setting. *J Laparoendosc Adv Surg Tech A.* 2007 Jun;17(3):375-9. X-4, X-5, X-6.
1380. Mahoney DH, Jr., Gonzales ET, Ferry GD, et al. Childhood acute leukemia: a search for occult extramedullary disease prior to discontinuation of chemotherapy. *Cancer.* 1981 Nov 1;48(9):1964-6. X-2, X-3.
1381. Mai PL, Friedlander M, Tucker K, et al. The International Testicular Cancer Linkage Consortium: a clinicopathologic descriptive analysis of 461 familial malignant testicular germ cell tumor kindred. *Urol Oncol.* 2010 Sep-Oct;28(5):492-9. X-2, X-3.
1382. Main KM, Kiviranta H, Virtanen HE, et al. Flame retardants in placenta and breast milk and cryptorchidism in newborn boys. *Environmental Health Perspectives.* 2007 Oct;115 (10):1519-1526. X-3.
1383. Main KM, Toppari J, Virtanen HE, et al. *International Journal of Andrology.* [Conference Abstract]. 2010 October;Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference Publication: (var.pagings). 33:30. X-3.
1384. Maizels M, Zaontz MR, Houlihan DL, et al. In-office ultrasonography to image the kidneys and bladder of children. *J Urol.* 1987 Oct;138(4 Pt 2):1031-5. X-4, X-5, X-6.
1385. Majeed HA, Ghandour K and Shahin HM. The acute scrotum in Arab children with familial Mediterranean fever. *Pediatr Surg Int.* 2000;16(1-2):72-4. X-2, X-3.
1386. Manak E, Waldschmidt J, Albrecht T, et al. Ultrasound examination of paediatric testicles after laparoscopic laser dissection of internal testicular vessels in cryptorchism. *Eur J Pediatr Surg.* 2002 Oct;12(5):322-6. X-4, X-5, X-6.
1387. Mandelbaum I, Williams SD and Einhorn LH. Aggressive surgical management of testicular carcinoma metastatic to lungs and mediastinum. *Ann Thorac Surg.* 1980 Sep;30(3):224-9. X-2, X-3.
1388. Mandell J, Bromley B, Peters CA, et al. Prenatal sonographic detection of genital malformations. *Journal of Urology.* 1995;153 (6):1994-1996. X-2, X-3.
1389. Mangoud AM, Emara MW, Ghobish A, et al. Hydrocele in filarial and non filarial patients. *Histopathological, histochemical and ultrastructural studies.* *J Egypt Soc Parasitol.* 1993 Apr;23(1):43-54. X-2, X-3.
1390. Manivel JC, Jessurun J, Wick MR, et al. Placental alkaline phosphatase immunoreactivity in testicular germ-cell neoplasms. *Am J Surg Pathol.* 1987 Jan;11(1):21-9. X-2, X-3.
1391. Manivel JC, Pettinato G, Reinberg Y, et al. Prune belly syndrome: clinicopathologic study of 29 cases. *Pediatr Pathol.* 1989;9(6):691-711. X-2, X-3.
1392. Manning MA and Woodward PJ. Testicular epidermoid cysts: sonographic features with clinicopathologic correlation. *J Ultrasound Med.* 2010 May;29(5):831-7. X-2, X-3.
1393. Manoharan M, Vyas S, Araki M, et al. Concurrent radical retropubic prostatectomy and Lichtenstein inguinal hernia repair through a single modified Pfannenstiel incision: a 3-year experience. *BJU Int.* 2006 Aug;98(2):341-4. X-2, X-3.
1394. Marekovic Z, Derezić D, Krhen I, et al. Urogenital war injuries. *Mil Med.* 1997 May;162(5):346-8. X-2, X-3.

1395. Mares AJ, Shkolnik A, Sacks M, et al. Aberrant (ectopic) adrenocortical tissue along the spermatic cord. *J Pediatr Surg*. 1980 Jun;15(3):289-92. X-2, X-3.
1396. Mariano MB and Tefilli MV. Laparoscopic retroperitoneal lymphadenectomy after chemotherapy for stage IIb testicular tumors. *Brazilian Journal of Urology*. 2001;27 (6):527-534. X-2, X-3.
1397. Marin P, Ferlin A, Moro E, et al. Different insulin-like 3 (INSL3) gene mutations not associated with human cryptorchidism. *J Endocrinol Invest*. 2001 Apr;24(4):RC13-5. X-3.
1398. Mark E, Castells S, Glassberg K, et al. Deficiency of androgen receptors in male pseudohermaphroditism. *Urology*. 1983 Feb;21(2):168-71. X-2, X-3.
1399. Markey CM, Jequier AM and Meyer GT. Effects of ischaemia on the caput epididymis and its relationship to higher epididymal obstruction: a qualitative study in the ram. *Int J Androl*. 1995 Aug;18(4):185-96. X-2, X-3.
1400. Maroof SA, Khan K, Khan Y, et al. Torsion of testicular appendix as a cause of acute scrotum in children: Experience in surgical management at lady reading hospital Peshawar. *Journal of Medical Sciences*. 2009;17 (1):40-44. X-3, X-4, X-5, X-6.
1401. Marrocco G, Bruner E, Vallasciani S, et al. Do patients with hypospadias and cryptorchidism share a common phenotype? Case-control study of an Italian paediatric population. *Journal of Pediatric Urology*. 2007 Dec;3 (6):477-479. X-3.
1402. Marth D, Scheidegger J and Studer UE. Ultrasonography of testicular tumors. *Urol Int*. 1990;45(4):237-40. X-2, X-3.
1403. Martinez-Pineiro L, Jr., Cerezo E, Cozar JM, et al. Value of testicular ultrasound in the evaluation of blunt scrotal trauma without haematocele. *Br J Urol*. 1992 Mar;69(3):286-90. X-2, X-3.
1404. Martini AC, Tissera A, Estofan D, et al. Overweight and seminal quality: A study of 794 patients. *Fertility and Sterility*. 2010 October;94 (5):1739-1743. X-2, X-3.
1405. Martorell M, Gil-Salom M, Perez-Valles A, et al. Presence of human papillomavirus DNA in testicular biopsies from nonobstructive azoospermic men. *Arch Pathol Lab Med*. 2005 Sep;129(9):1132-6. X-2, X-3.
1406. Mason MD, Featherstone T, Olliff J, et al. Inguinal and iliac lymph node involvement in germ cell tumours of the testis: implications for radiological investigation and for therapy. *Clin Oncol (R Coll Radiol)*. 1991 May;3(3):147-50. X-2, X-3.
1407. Massad CA, Cohen MB, Kogan BA, et al. Morphology and histochemistry of infant testes in the prune belly syndrome. *J Urol*. 1991 Dec;146(6):1598-600. X-2, X-3.
1408. Masterson TA, Wedmid A, Sandhu JS, et al. Outcomes after radical prostatectomy in men receiving previous pelvic radiation for non-prostate malignancies. *BJU Int*. 2009 Aug;104(4):482-5. X-2, X-3.
1409. Matalliotakis I, Fragouli Y, Kyriakou D, et al. Enhancement of soluble CD23 levels in the seminal plasma of infertile men with idiopathic testicular lesion. *Archives of Andrology*. 1999;43 (2):105-111. X-2, X-3.
1410. Matalliotakis IM, Cakmak H, Fragouli Y, et al. Increased IL-18 levels in seminal plasma of infertile men with genital tract infections. *Am J Reprod Immunol*. 2006 Jun;55(6):428-33. X-2, X-3.
1411. Mathew RM, Vandenberghe R, Garcia-Merino A, et al. Orchiectomy for suspected microscopic tumor in patients with anti-Ma2-associated encephalitis. *Neurology*. 2007 Mar 20;68(12):900-5. X-2, X-3.
1412. Mathews RI, Perlman E, Marsh DW, et al. Gonadal morphology in cloacal exstrophy: implications in gender assignment. *BJU Int*. 1999 Jul;84(1):99-100. X-2, X-3.
1413. Matsuda T, Muguruma K, Hiura Y, et al. Seminal tract obstruction caused by childhood inguinal herniorrhaphy: results of microsurgical reanastomosis. *J Urol*. 1998 Mar;159(3):837-40. X-2, X-3.
1414. Matsumiya K, Namiki M, Kondoh N, et al. New indication of testis biopsy for azoospermia: a clinical study in Japanese patients. *Int J Urol*. 1994 Jun;1(2):177-80. X-2, X-3.
1415. Matsumiya K, Namiki M, Takahara S, et al. Clinical study of azoospermia. *Int J Androl*. 1994 Jun;17(3):140-2. X-2, X-3.
1416. Matthews GJ and Goldstein M. Microsurgical autogenous sperm reservoir with simultaneous epididymal sperm aspiration: a novel approach for the man with surgically unreconstructable obstruction. *Tech Urol*. 1995 Fall;1(3):120-5. X-2, X-3.
1417. Matthews GJ, Matthews ED and Goldstein M. Induction of spermatogenesis and achievement of pregnancy after microsurgical varicocelectomy in men with azoospermia and severe oligoasthenospermia. *Fertil Steril*. 1998 Jul;70(1):71-5. X-2, X-3.
1418. Mattila-Vuori A, Salo M, Iisalo E, et al. Local and systemic immune response to surgery under balanced anaesthesia in children. *Paediatr Anaesth*. 2000;10(4):381-8. X-2, X-3.
1419. Maurer B, Gromoll J, Simoni M, et al. Prevalence of Y chromosome microdeletions in infertile men who consulted a tertiary care medical centre: the Munster experience. *Andrologia*. 2001 Jan;33(1):27-33. X-2, X-3.
1420. Mayagoitia JC, Prieto-Diaz Chavez E, Suarez D, et al. Predictive factors comparison of complications and recurrences in three tension-free herniorrhaphy techniques. *Hernia*. 2006 Apr;10 (2):147-151. X-2, X-3.
1421. Mayr J, Pusch HH, Schimpl G, et al. Semen quality and gonadotropin levels in patients operated upon for cryptorchidism. *Pediatric Surgery International*. 1996 Jun;11 (5-6):354-358. X-4, X-5, X-6.
1422. Mayr J, Rune GM, Fasching G, et al. Sertoli cell morphology in retractile prepubertal testes. *Pediatric Surgery International*. 1994;9 (1-2):90-94. X-3.

1423. Mazen I, El-Ruby M and El-Bassyouni HT. Variable associations of Klinefelter syndrome in children. *J Pediatr Endocrinol Metab.* 2010 Oct;23(10):985-9. X-2, X-3.
1424. Mazen I, El-Ruby M, Kamal R, et al. Screening of genital anomalies in newborns and infants in two Egyptian governorates. *Horm Res Paediatr.* 2010;73(6):438-42. X-2, X-3.
1425. Mazzilli F, Rossi T, Marchesini M, et al. Superoxide anion in human semen related to seminal parameters and clinical aspects. *Fertil Steril.* 1994 Oct;62(4):862-8. X-1, X-2, X-3.
1426. McCandless SE, Saal HM, Braddock SR, et al. Clinical report - Health supervision for children with Prader-Willi syndrome. *Pediatrics.* 2011 January;127 (1):195-204. X-1, X-2, X-3.
1427. McClure RD and Hricak H. Scrotal ultrasound in the infertile man: detection of subclinical unilateral and bilateral varicoceles. *J Urol.* 1986 Apr;135(4):711-5. X-2, X-3.
1428. McCombe AW and Scobie WG. Torsion of scrotal contents in children. *Br J Urol.* 1988 Feb;61(2):148-50. X-2, X-3.
1429. McCullough R, Marshall FF, Berry SJ, et al. The influence of epididymal agenesis on the development and maturation of the testis: Experimental model and clinical correlations. *Urological Research.* 1984;12 (3):165-170. X-2, X-3,
1430. McGillicuddy JE. Prospective randomized comparison of the Shouldice and Lichtenstein hernia repair procedures. *Archives of Surgery.* 1998 Sep;133 (9):974-978. X-2, X-3.
1431. McGlynn KA, Sakoda LC, Rubertone MV, et al. Body size, dairy consumption, puberty, and risk of testicular germ cell tumors. *Am J Epidemiol.* 2007 Feb 15;165(4):355-63. X-2, X-3.
1432. McGregor DB, Halverson K and McVay CB. The unilateral pediatric inguinal hernia: Should the contralateral side be explored? *J Pediatr Surg.* 1980 Jun;15(3):313-7. X-2, X-3.
1433. McQuiston L, Macneily A, Liu D, et al. Computer enhanced visual learning method to train urology residents in pediatric orchiopexy provided a consistent learning experience in a multi-institutional trial. *J Urol.* 2010 Oct;184(4 Suppl):1748-53. X-2.
1434. Meador KJ, Baker GA, Finnell RH, et al. In utero antiepileptic drug exposure: Fetal death and malformations. *Neurology.* 2006 Aug;67 (3):407-412. X-2, X-3.
1435. Megarbane A, Rassi S, Estephan F, et al. Post-natal short stature, short limbs, brachydactyly, facial abnormalities, and delayed bone age: a new syndrome? *Am J Med Genet A.* 2004 Feb 15;125A(1):57-60. X-3.
1436. Meglin AJ, Balotin RJ, Jelinek JS, et al. Cloacal exstrophy: radiologic findings in 13 patients. *AJR Am J Roentgenol.* 1990 Dec;155(6):1267-72. X-2, X-3.
1437. Mehta A, Boekelheide K and Sigman M. *Journal of Andrology.* [Conference Abstract]. 2010 March-April; Conference: 35th Annual Meeting of the American Society of Andrology, ASA Houston, TX United States. Conference Start: 20100410 Conference End: 20100413. Conference: 35th Annual Meeting of the American Society of Andrology, ASA Houston, TX United States. Conference Start: 20100410 Conference End: 20100413. Conference Publication: (var.pagings). 31:44-45. X-2, X-3.
1438. Meij-de Vries A, Hack WW, Heij HA, et al. Perioperative surgical findings in congenital and acquired undescended testis. *J Pediatr Surg.* 2010 Sep;45(9):1874-81. X-4, X-5, X-6.
1439. Meirov D and Schenker JG. Cancer and male infertility. *Human Reproduction.* 1995;10 (8):2017-2022. X-1, X-2, X-3.
1440. Melton LJ, 3rd, Alothman KI, Achenbach SJ, et al. Decline in bilateral orchiectomy for prostate cancer in Olmsted county, Minnesota, 1956-2000. *Mayo Clin Proc.* 2001 Dec;76(12):1199-203. X-4, X-5, X-6.
1441. Memish ZA and Venkatesh S. Brucellar epididymo-orchitis in Saudi Arabia: A retrospective study of 26 cases and review of the literature. *BJU International.* 2001;88 (1):72-76. X-2, X-3.
1442. Menchini-Fabris GF, Canale D, Basile-Fasolo C, et al. Varicocele and male subfertility: prognostical criteria in the surgical treatment. *Andrologia.* 1985 Jan-Feb;17(1):16-21. X-2, X-3.
1443. Mendez R, Tellado MG, Somoza I, et al. Ectopic adrenal tissue in the spermatic cord in pediatric patients: Surgical implications. *International Braz J Urol.* 2006 Mar;32 (2):202-207. X-4, X-5, X-6.
1444. Mendez-Gallart R, Bautista Casasnovas A, Estevez Martinez E, et al. Reactive hydrocele after laparoscopic Palomo varicocele ligation in pediatrics. *Arch Esp Urol.* 2010 Sep;63(7):532-6. X-2, X-3.
1445. Mendez-Gallart R, Bautista-Casasnovas A, Estevez-Martinez E, et al. Laparoscopic Palomo varicocele surgery: lessons learned after 10 years' follow up of 156 consecutive pediatric patients. *J Pediatr Urol.* 2009 Apr;5(2):126-31. X-2, X-3.
1446. Meng MV, Black LD, Cha I, et al. Impaired spermatogenesis in men with congenital absence of the vas deferens. *Hum Reprod.* 2001 Mar;16(3):529-33. X-2, X-3.
1447. Mengel W, Wronecki K, Schroeder J, et al. Histopathology of the cryptorchid testis. *Urol Clin North Am.* 1982 Oct;9(3):331-8. X-3.
1448. Mennicke K, Klingenberg RD, Bals-Pratsch M, et al. Rational approach to genetic testing of cystic fibrosis (CF) in infertile men. *Andrologia.* 2005 Feb;37 (1):1-9. X-2, X-3.
1449. Merck C, Angervall L, Kindblom L, et al. Myxofibrosarcoma. A malignant soft tissue tumor of fibroblastic-histiocytic origin. A clinicopathologic and prognostic study of 110 cases using multivariate analysis. *Acta Pathologica Microbiologica et Immunologica Scandinavica Supplementum.* [Journal]. 1983;91(Suppl. 282). X-2, X-3.

1450. Merino G, Murrieta S, Rodriguez L, et al. Sexually transmitted diseases and related genital pathologies in oligozoospermia. *Arch Androl.* 1993 Sep-Oct;31(2):87-94. X-1, X-2, X-3.
1451. Merksz M and Toth J. The state of the testicle and the epididymis associated with exstrophy of the bladder in undescended testes. *Acta Chir Hung.* 1990;31(4):297-301. X-3, X-4, X-5, X-6.
1452. Meschede D, Behre HM and Nieschlag E. Endocrine and spermatological characteristics of 135 patients with bilateral megalotestis. *Andrologia.* 1995 Jul-Aug;27(4):207-12. X-2, X-3.
1453. Mesrobian HG, Chassaignac JM and Laud PW. The presence or absence of an impalpable testis can be predicted from clinical observations alone. *BJU Int.* 2002 Jul;90(1):97-9. X-4, X-5, X-6.
1454. Metin A, Bulut O and Temizkan M. Relationship between the left spermatic vein diameter measured by ultrasound and palpated varicocele and Doppler ultrasound findings. *Int Urol Nephrol.* 1991;23(1):65-8. X-2, X-3.
1455. Metts IJC, Kotkin L, Kasper S, et al. Genital malformations and coexistent urinary tract or spinal anomalies in patients with imperforate anus. *Journal of Urology.* 1997;158 (3 SUPPL.):1298-1300. X-2, X-3.
1456. Meza MP, Amundson GM, Aquilina JW, et al. Color flow imaging in children with clinically suspected testicular torsion. *Pediatr Radiol.* 1992;22(5):370-3. X-2, X-3.
1457. Micic M, Micic S, Ganey V, et al. Cytogenetic analysis of men with cryptorchidism and reduced fertility. *Urologia Internationalis.* 1987;42 (1):58-60. X-3.
1458. Middelburg KJ, Heineman MJ, Haadsma ML, et al. Neurological condition of infants born after in vitro fertilization with preimplantation genetic screening. *Pediatric Research.* 2010 April;67 (4):430-434. X-2, X-3.
1459. Middendorff R, Davidoff M and Holstein AF. Neuroendocrine marker substances in human Leydig cells--changes by disturbances of testicular function. *Andrologia.* 1993 Sep-Oct;25(5):257-62. X-3.
1460. Middleton WD and Bell MW. Analysis of intratesticular arterial anatomy with emphasis on transmediastinal arteries. *Radiology.* 1993 Oct;189(1):157-60. X-2, X-3.
1461. Mieusset R, Bujan L and Mansat A. Effects of artificial cryptorchidism on sperm morphology. *Fertility and Sterility.* 1987;47 (1):150-155. X-2, X-3.
1462. Mieusset R, Bujan L, Mansat A, et al. Hyperthermia and human spermatogenesis: enhancement of the inhibitory effect obtained by 'artificial cryptorchidism'. *Int J Androl.* 1987 Aug;10(4):571-80. X-2, X-3.
1463. Mieusset R, Bujan L, Plantavid M, et al. Increased levels of serum follicle-stimulating hormone and luteinizing hormone associated with intrinsic testicular hyperthermia in oligospermic infertile men. *J Clin Endocrinol Metab.* 1989 Feb;68(2):419-25. X-2, X-3.
1464. Mieusset R, Fouda PJ, Vaysse P, et al. Increase in testicular temperature in case of cryptorchidism in boys. *Fertil Steril.* 1993 Jun;59(6):1319-21. X-4, X-5, X-6.
1465. Mieusset R, Grandjean H, Mansat A, et al. Inhibiting effect of artificial cryptorchidism on spermatogenesis. *Fertil Steril.* 1985 Apr;43(4):589-94. X-2, X-3.
1466. Mihmanli I, Kantarci F, Kulaksizoglu H, et al. Testicular size and vascular resistance before and after hydrocelectomy. *AJR Am J Roentgenol.* 2004 Nov;183(5):1379-85. X-2, X-3.
1467. Mikaelsson C, Arnbjornsson E, Lindhagen T, et al. Routine laparoscopy for nonpalpable testes? *J Laparoendosc Adv Surg Tech A.* 1999 Jun;9(3):239-41. X-4, X-5, X-6.
1468. Mikuz G, Schwarz S, Hopfel-Kreiner I, et al. Leydig cell tumor of the testis. Morphological and endocrinological investigations in two cases. *Eur Urol.* 1980;6(5):293-300. X-2, X-3.
1469. Milam DF, Cartwright PC and Snow BW. Urological manifestations of sacrococcygeal teratoma. *Journal of Urology.* 1993;149 (3):574-576. X-2, X-3.
1470. Miliaras D, Vlahakis-Miliaras E, Anagnostopoulos D, et al. Gross morphologic variations and histologic changes in cryptorchid testes. *Pediatr Surg Int.* 1997 Feb;12(2-3):158-62. X-4, X-5, X-6.
1471. Milkins RC, Landsdown MJR, Wedgwood KR, et al. Laparoscopic hernia repair: A prospective study of 409 cases. *Minimally Invasive Therapy.* 1993;2 (5):237-242. X-2, X-3.
1472. Miller JS, Lee TK, Epstein JI, et al. The utility of microscopic findings and immunohistochemistry in the classification of necrotic testicular tumors: a study of 11 cases. *Am J Surg Pathol.* 2009 Sep;33(9):1293-8. X-2, X-3.
1473. Miller KD, Coughlin MT and Lee PA. Fertility after unilateral cryptorchidism. Paternity, time to conception, pretreatment testicular location and size, hormone and sperm parameters. *Horm Res.* 2001;55(5):249-53. X-4, X-5, X-6.
1474. Mineur P, De Cooman S and Hustin J. Feminizing testicular Leydig cell tumor: Hormonal profile before and after unilateral orchidectomy. *Journal of Clinical Endocrinology and Metabolism.* 1987;64 (4):686-691. X-2, X-3.
1475. Minevich E, Wacksman J, Lewis AG, et al. Inguinal microsurgical varicocelectomy in the adolescent: technique and preliminary results. *J Urol.* 1998 Mar;159(3):1022-4. X-2, X-3.
1476. Mininberg DT, Rodger JC and Bedford JM. Ultrastructural evidence of the onset of testicular pathological conditions in the cryptorchid human testis within the first year of life. *J Urol.* 1982 Oct;128(4):782-4. X-4, X-5, X-6.
1477. Mininberg DT and Schlossberg S. The role of the epididymis in testicular descent. *J Urol.* 1983 Jun;129(6):1207-8. X-4, X-5, X-6.

1478. Mir IS, Mohsin M, Kirmani O, et al. Is laparoscopic orchidectomy the treatment of choice in adults with impalpable testis in rural hospitals in the developing world? *Trop Doct.* 2009 Jan;39(1):12-5. X-4, X-5, X-6.
1479. Mirilas P and De Almeida M. Absence of antisperm surface antibodies in prepubertal boys with cryptorchidism and other anomalies of the inguinoscrotal region before and after surgery. *J Urol.* 1999 Jul;162(1):177-81. X-3, X-4, X-5, X-6.
1480. Mirilas P, Mentessidou A, Kontis E, et al. Sonographic evidence for patency of the processus vaginalis in children with acquired undescended testis. *International Journal of Andrology.* 2011 February;34 (1):49-54. X-4, X-5, X-6.
1481. Mirshemirani A, Ghorobi J, Roorzroukh M, et al. Urogenital tract abnormalities associated with congenital Anorectal malformations. *Iranian Journal of Pediatrics.* 2008 Jun;18 (2):171-174. X-3.
1482. Mishriki SF, Winkle DC and Frank JD. Fixation of a single testis: always, sometimes or never. *Br J Urol.* 1992 Mar;69(3):311-3. X-2, X-3.
1483. Misra D, Hewitt G, Potts SR, et al. Inguinal herniotomy in young infants, with emphasis on premature neonates. *J Pediatr Surg.* 1994 Nov;29(11):1496-8. X-2, X-3.
1484. Misra D, Mushtaq I, Drake DP, et al. Associated urologic anomalies in low imperforate anus are capable of causing significant morbidity: a 15-year experience. *Urology.* 1996 Aug;48(2):281-3. X-2, X-3.
1485. Misra M, MacLaughlin DT, Donahoe PK, et al. The role of Mullerian inhibiting substance in the evaluation of phenotypic female patients with mild degrees of virilization. *J Clin Endocrinol Metab.* 2003 Feb;88(2):787-92. X-2, X-3, X-9.
1486. Miyagawa Y, Tsujimura A, Matsumiya K, et al. Outcome of gonadotropin therapy for male hypogonadotropic hypogonadism at university affiliated male infertility centers: a 30-year retrospective study. *J Urol.* 2005 Jun;173(6):2072-5. X-2, X-3.
1487. Miyake H, Hara I, Takechi Y, et al. Long-term follow-up in patients with bilateral testicular germ cell tumors: A report of ten cases. *International Journal of Clinical Oncology.* 1999 Aug;4 (4):244-247. X-2, X-3.
1488. Mizrak SC, Chikhovskaya JV, Sadri-Ardekani H, et al. Embryonic stem cell-like cells derived from adult human testis. *Hum Reprod.* 2010 Jan;25(1):158-67. X-2, X-3.
1489. Mizuno K, Kojima Y, Kurokawa S, et al. Identification of differentially expressed genes in human cryptorchid testes using suppression subtractive hybridization. *J Urol.* 2009 Mar;181(3):1330-7; discussion 1337. X-3, X-4, X-5, X-6.
1490. Moazzam M, Siddiqui KM, Ather MH, et al. Surgical ligation of scrotal varicocele for male factor infertility is a valid option of treatment. *J Pak Med Assoc.* 2006 Aug;56(8):363-5. X-2, X-3.
1491. Moerman P, Fryns JP, Goddeeris P, et al. Pathogenesis of the prune-belly syndrome: a functional urethral obstruction caused by prostatic hypoplasia. *Pediatrics.* 1984 Apr;73(4):470-5. X-3.
1492. Moerman P, Verbeken E, Fryns JP, et al. The Meckel Syndrome. Pathological and cytogenetic observations in eight cases. *Hum Genet.* 1982;62(3):240-5. X-2, X-3.
1493. Mohr AM, Pham AM, Lavery RF, et al. Management of trauma to the male external genitalia: the usefulness of American Association for the Surgery of Trauma organ injury scales. *J Urol.* 2003 Dec;170(6 Pt 1):2311-5. X-2, X-3.
1494. Mol NM, Sorensen N, Weihe P, et al. Spermaturia and serum hormone concentrations at the age of puberty in boys prenatally exposed to polychlorinated biphenyls. *European Journal of Endocrinology.* 2002;146 (3):357-363. X-3.
1495. Moller H and Skakkebaek NE. Risks of testicular cancer and cryptorchidism in relation to socio-economic status and related factors: case-control studies in Denmark. *Int J Cancer.* 1996 May 3;66(3):287-93. X-3, X-4, X-5, X-6.
1496. Moller H and Skakkebaek NE. Testicular cancer and cryptorchidism in relation to prenatal factors: case-control studies in Denmark. *Cancer Causes Control.* 1997 Nov;8(6):904-12. X-3.
1497. Molnar D, Leb J, Hidvegi J, et al. Follow-up examination of patients with undescended testicles. *Acta Paediatr Acad Sci Hung.* 1981;22(3):177-85. X-4, X-5, X-6.
1498. Moltz L, Schwartz U, Pickartz H, et al. XY gonadal dysgenesis: aberrant testicular differentiation in the presence of H-Y antigen. *Obstet Gynecol.* 1981 Jul;58(1):17-25. X-2, X-3.
1499. Montanari E, Trinchieri A, Zanetti G, et al. Andrological laparoscopy. *Annales d'Urologie.* 1995;29 (2):106-112. X-2.
1500. Montgomery P and Shanti G. The influence of bilateral orchiectomy on self-concept: a pilot study. *J Adv Nurs.* 1996 Dec;24(6):1249-56. X-2, X-3.
1501. Montironi R. Intratubular germ cell neoplasia of the testis: Testicular intraepithelial neoplasia. *European Urology.* 2002 01 Jun;41 (6):651-654. X-1, X-2, X-3.
1502. Moore GP, Alden AW and Rodman GH. Is closed diagnostic peritoneal lavage contraindicated in patients with previous abdominal surgery? *Acad Emerg Med.* 1997 Apr;4(4):287-90. X-2, X-3.
1503. Moore SW. Down syndrome and Hirschsprung's disease: A significant relationship? *International Journal on Disability and Human Development.* 2006 Oct;5 (4):369-375. X-3.
1504. Moorthy B, Papadopoulou M, Shaw DG, et al. Depot testosterone in boys with anorchia or gonadotrophin deficiency: effect on growth rate and adult height. *Arch Dis Child.* 1991 Feb;66(2):197-9. X-3, X-4, X-5, X-6.

1505. Mor Y, Pinthus JH, Nadu A, et al. Testicular fixation following torsion of the spermatic cord--does it guarantee prevention of recurrent torsion events? *J Urol.* 2006 Jan;175(1):171-3; discussion 173-4. X-2, X-3.
1506. Moraes AJ, Pereira RM, Cocuzza M, et al. Minor sperm abnormalities in young male post-pubertal patients with juvenile dermatomyositis. *Braz J Med Biol Res.* 2008 Dec;41(12):1142-7. X-2, X-3.
1507. Morag B, Rubinstein ZJ, Goldwasser B, et al. Percutaneous venography and occlusion in the management of spermatic varicoceles. *AJR Am J Roentgenol.* 1984 Sep;143(3):635-40. X-2, X-3.
1508. Morag B, Rubinstein ZJ, Madgar I, et al. The role of spermatic venography after surgical high ligation of the left spermatic veins: diagnosis and percutaneous occlusion. *Urol Radiol.* 1985;7(1):32-4. X-2, X-3.
1509. Morales V, Santana P, Diaz R, et al. Intratesticular delivery of tumor necrosis factor-alpha and ceramide directly abrogates steroidogenic acute regulatory protein expression and Leydig cell steroidogenesis in adult rats. *Endocrinology.* 2003 Nov;144(11):4763-72. X-2, X-3.
1510. Morales-Barrera R, Valverde C, Rodon J, et al. Bilateral testicular germ cell tumours: a single hospital experience. *Clin Transl Oncol.* 2010 Apr;12(4):299-302. X-2, X-3.
1511. Morales-Surez-Varela MM, Toft GV, Jensen MS, et al. Parental occupational exposure to endocrine disrupting chemicals and male genital malformations: A study in the danish national birth cohort study. *Environmental Health: A Global Access Science Source.* 2011;10 (1)(3). X-3.
1512. Morecroft JA, Stringer MD, Higgins M, et al. Follow-up after inguinal herniotomy or surgery for hydrocele in boys. *Br J Surg.* 1993 Dec;80(12):1613-4. X-2, X-3.
1513. Morel Y, Rey R, Teinturier C, et al. Aetiological diagnosis of male sex ambiguity: A collaborative study. *European Journal of Pediatrics.* 2002;161 (1):49-59. X-3, X-4, X-5, X-6.
1514. Moretti E, Di Cairano G, Capitani S, et al. Cryptorchidism and semen quality: a TEM and molecular study. *J Androl.* 2007 Jan-Feb;28(1):194-9. X-3, X-4, X-5, X-6.
1515. Mori M, Davies TW, Tsukamoto T, et al. Maternal and other factors of cryptorchidism--a case-control study in Japan. *Kurume Med J.* 1992;39(2):53-60. X-2, X-3.
1516. Moriya K, Mitsui T, Tanaka H, et al. Long-term outcome of pituitary-gonadal axis and gonadal growth in patients with hypospadias at puberty. *J Urol.* 2010 Oct;184(4 Suppl):1610-4. X-2, X-3.
1517. Moro E, Marin P, Rossi A, et al. Y chromosome microdeletions in infertile men with varicocele. *Mol Cell Endocrinol.* 2000 Mar 30;161(1-2):67-71. X-2, X-3.
1518. Mosharafa AA, Foster RS, Bihle R, et al. Does retroperitoneal lymph node dissection have a curative role for patients with sex cord-stromal testicular tumors? *Cancer.* 2003 Aug 15;98(4):753-7. X-2, X-3.
1519. Moss AR, Osmond D, Bacchetti P, et al. Hormonal risk factors in testicular cancer. A case-control study. *Am J Epidemiol.* 1986 Jul;124(1):39-52. X-2, X-3.
1520. Moul JW, Paulson DF and Walther PJ. Refusal of cancer therapy in testicular cancer: Recognizing and preventing a significant problem. *World Journal of Urology.* 1990;8 (1):58-62. X-3.
1521. Moyssakis IE, Rallidis LS, Guida GF, et al. Incidence and evolution of carcinoid syndrome in the heart. *J Heart Valve Dis.* 1997 Nov;6(6):625-30. X-2, X-3.
1522. Mozingo DW, Walters MJ, Otchy DP, et al. Properitoneal synthetic mesh repair of recurrent inguinal hernias. *Surg Gynecol Obstet.* 1992 Jan;174(1):33-5. X-2, X-3.
1523. Muffly KE, McWhorter CA, Bartone FF, et al. The absence of premalignant changes in the cryptorchid testis before adulthood. *J Urol.* 1984 Mar;131(3):523-5. X-3.
1524. Mulhall JP, Ghaly SW, Aviv N, et al. The utility of optical loupe magnification for testis sperm extraction in men with nonobstructive azoospermia. *J Androl.* 2005 Mar-Apr;26(2):178-81. X-2, X-3.
1525. Mulhall JP, Stokes S, Andrawis R, et al. Simultaneous microsurgical vasal reconstruction and varicocele ligation: safety profile and outcomes. *Urology.* 1997 Sep;50(3):438-42. X-2, X-3.
1526. Muller J, Ritzén EM, Ivarsson SA, et al. Management of males with 45,X/46,XY gonadal dysgenesis. *Horm Res.* 1999;52(1):11-4. X-3.
1527. Muller J, Skakkebaek NE, Nielsen OH, et al. Cryptorchidism and testis cancer. Atypical infantile germ cells followed by carcinoma in situ and invasive carcinoma in adulthood. *Cancer.* 1984 Aug 15;54(4):629-34. X-3, X-4, X-5, X-6.
1528. Muller J, Skakkebaek NE and Ratcliffe SG. Quantified testicular histology in boys with sex chromosome abnormalities. *International Journal of Andrology.* 1995;18 (2):57-62. X-3.
1529. Mumperow E, Lauke H, Holstein AF, et al. Further practical experiences in the recognition and management of carcinoma in situ of the testis. *Urol Int.* 1992;48(2):162-6. X-2, X-3.
1530. Muneer A, Laghari ZH, Shaikh AR, et al. Gynaecomastia: management in a developing country. *J Ayub Med Coll Abbottabad.* 2009 Jul-Sep;21(3):7-11. X-2, X-3.
1531. Muroya K, Okuyama T, Goishi K, et al. Sex-determining gene(s) on distal 9p: clinical and molecular studies in six cases. *J Clin Endocrinol Metab.* 2000 Sep;85(9):3094-100. X-2, X-3.
1532. Murphy FL, Law H, Mushtaq I, et al. Testicular and paratesticular pathology in infants and children: the histopathological experience of a tertiary paediatric unit over a 17 year period. *Pediatr Surg Int.* 2007 Sep;23(9):867-72. X-3.
1533. Murugaesu N, Powles T, Bestwick J, et al. Long-term follow-up of testicular cancer patients shows no predisposition to osteoporosis. *Osteoporos Int.* 2009 Sep;20(9):1627-30. X-2, X-3.

1534. Mutafoglu-Uysal K, Gunes D, Tufekci O, et al. The incidence of congenital malformations in children with cancer. *Turkish Journal of Pediatrics*. 2009 September-October;51 (5):444-452. X-2, X-3.
1535. Muttarak M, Peh WC and Chaiwun B. Malignant germ cell tumours of undescended testes: imaging features with pathological correlation. *Clin Radiol*. 2004 Feb;59(2):198-204. X-4, X-5, X-6.
1536. Muzzonigro G, Minardi D, Polito M, Jr., et al. Cryptorchidism and infertility: retrospective study of 18 post puberal patients affected with monolateral cryptorchidism. *Arch Ital Urol Androl*. 1996 Apr;68(2):75-80. X-3.
1537. Nachman J, Palmer NF, Sather HN, et al. Open-wedge testicular biopsy in childhood acute lymphoblastic leukemia after two years of maintenance therapy: Diagnostic accuracy and influence on outcome - A report from Children's Cancer Study Group. *Blood*. 1990;75 (5):1051-1055. X-2, X-3.
1538. Nachman J, Palmer NF, Sather HN, et al. Open-wedge testicular biopsy in childhood acute lymphoblastic leukemia after two years of maintenance therapy: diagnostic accuracy and influence on outcome--a report from Children's Cancer Study Group. *Blood*. 1990 Mar 1;75(5):1051-5. X-2, X-3.
1539. Nachtigall LB, Boepple PA, Seminara SB, et al. Inhibin B secretion in males with gonadotropin-releasing hormone (GnRH) deficiency before and during long-term GnRH replacement: Relationship to spontaneous puberty, testicular volume, and prior treatment - A clinical research center study. *Journal of Clinical Endocrinology and Metabolism*. 1996;81 (10):3520-3525. X-2, X-3.
1540. Nachtsheim DA, Scheible FW and Gosink B. Ultrasonography of testis tumors. *J Urol*. 1983 May;129(5):978-81. X-2, X-3.
1541. Nader S, Schultz PN, Cundiff JH, et al. Endocrine profiles of patients with testicular tumors treated with radiotherapy. *Int J Radiat Oncol Biol Phys*. 1983 Nov;9(11):1723-6. X-2, X-3.
1542. Nagar H and Haddad R. Impact of early orchidopexy on testicular growth. *Br J Urol*. 1997 Aug;80(2):334-5. X-4, X-5, X-6.
1543. Nagar H and Kessler A. Abdominoscrotal hydrocele in infancy: A study of 15 cases. *Pediatric Surgery International*. 1998 Mar;13 (2-3):189-190. X-2, X-3.
1544. Nalesnik JG, Sabanegh ES, Jr., Eng TY, et al. Fertility in men after treatment for stage 1 and 2A seminoma. *Am J Clin Oncol*. 2004 Dec;27(6):584-8. X-2, X-3.
1545. Nangia AK, Myles JL and Thomas AJ. Vasectomy reversal for the post-vasectomy pain syndrome: a clinical and histological evaluation. *J Urol*. 2000 Dec;164(6):1939-42. X-2, X-3.
1546. Naude AM, Heyns CF and Matin SF. Laparoscopic urology training in South Africa. *J Endourol*. 2005 Dec;19(10):1180-4. X-2, X-3.
1547. Nazir M and Saebo A. Contralateral inguinal hernial development and ipsilateral recurrence following unilateral hernial repair in infants and children. *Acta Chir Belg*. 1996 Feb;96(1):28-30. X-2, X-3.
1548. Neel KF. Orchidopexy for undescended testis among saudi children: Is it conducted at the optimal age? *Current Pediatric Research*. 2010 Jan-June;14 (1):39-41. X-4, X-5, X-6.
1549. Negri L, Albani E, DiRocco M, et al. Testicular sperm extraction in azoospermic men submitted to bilateral orchidopexy. *Hum Reprod*. 2003 Dec;18(12):2534-9. X-2, X-3.
1550. Negri L, Benaglia R, Fiamengo B, et al. Cancer risk in male factor-infertility. *Placenta*. 2008 Oct;29 Suppl B:178-83. X-2, X-3.
1551. Newby JA and Howard CV. Environmental influences in cancer aetiology. *Journal of Nutritional & Environmental Medicine*. 2005;15(2-3):56-114. X-1, X-2, X-3.
1552. Newhouse JH. Clinical use of urinary tract magnetic resonance imaging. *Radiologic Clinics of North America*. 1991;29 (3):455-474. X-1, X-2, X-3.
1553. Ng AWH, Chu WCW, Ching ASC, et al. High-resolution sonography for paediatric scrotal pathology. *Journal of the Hong Kong College of Radiologists*. 2008;11 (1):47-55. X-1, X-2, X-3.
1554. Nicopoulios JDM, Gilling-Smith C and Ramsay JWA. Does the cause of obstructive azoospermia affect the outcome of intracytoplasmic sperm injection: A meta-analysis. *BJU International*. 2004 Jun;93 (9):1282-1286. X-2, X-3.
1555. Niculescu AM. Effects of in utero exposure to DES on male progeny. *J Obstet Gynecol Neonatal Nurs*. 1985 Nov-Dec;14(6):468-70. X-2, X-3.
1556. Niederkohr RD and Levin LA. Management of the patient with suspected temporal arteritis: A decision-analytic approach. *Ophthalmology*. 2005 May;112 (5):744-756. X-2, X-3.
1557. Nihoul-Fekete C, Lortat-Jacob S, Cachin O, et al. Preservation of gonadal function in true hermaphroditism. *J Pediatr Surg*. 1984 Feb;19(1):50-5. X-2, X-3.
1558. Nijman JM, Jager S, Boer PW, et al. The treatment of ejaculation disorders after retroperitoneal lymph node dissection. *Cancer*. 1982 Dec 15;50(12):2967-71. X-2, X-3.
1559. Nijman JM, Schraffordt Koops H, Kremer J, et al. Fertility and hormonal function in patients with a nonseminomatous tumor of the testis. *Arch Androl*. 1985;14(2-3):239-46. X-2, X-3.
1560. Nijman JM, Schraffordt Koops H, Oldhoff J, et al. Sexual function after bilateral retroperitoneal lymph node dissection for nonseminomatous testicular cancer. *Arch Androl*. 1987;18(3):255-67. X-2, X-3.
1561. Nimri R, Lebenthal Y, Lazar L, et al. A novel loss-of-function mutation in GPR54/KISS1R leads to hypogonadotropic hypogonadism in a highly consanguineous family. *Journal of Clinical Endocrinology and Metabolism*. 2011 March;96 (3):E536-E545. X-3.

1562. Nishi M, Miyake H, Takeda T, et al. Congenital malformations and childhood cancer. *Med Pediatr Oncol.* 2000 Apr;34(4):250-4. X-2, X-3.
1563. Nishida T, Ueyama T, Sugiyama T, et al. Intrasplenic autograft of testicular tissue in rats. *Oncol Rep.* 1998 Jan-Feb;5(1):157-9. X-2, X-3.
1564. Nishiyama H, Danno S, Kaneko Y, et al. Decreased expression of cold-inducible RNA-binding protein (CIRP) in male germ cells at elevated temperature. *Am J Pathol.* 1998 Jan;152(1):289-96. X-2, X-3.
1565. Nishiyama T, Tanikawa T, Tomita Y, et al. Clinical studies of testicular tumors. *Nishinihon Journal of Urology.* 1994;56 (1):33-37. X-2, X-3.
1566. Nishiyama T and Terunuma M. Hormone/antihormone withdrawal and dexamethasone for hormone-refractory prostate cancer. *Int J Urol.* 1998 Jan;5(1):44-7. X-2, X-3.
1567. Nistal M, Castillo MC, Regadera J, et al. Adenomatous hyperplasia of the rete testis. A review and report of new cases. *Histology and Histopathology.* 2003 Jul;18 (3):741-752. X-2, X-3.
1568. Nistal M, Codesal J and Paniagua R. Carcinoma in situ of the testis in infertile men. A histological, immunocytochemical, and cytophotometric study of DNA content. *J Pathol.* 1989 Nov;159(3):205-10. X-2, X-3.
1569. Nistal M, De Mora JC and Paniagua R. Classification of several types of maturational arrest of spermatogonia according to Sertoli cell morphology: an approach to aetiology. *Int J Androl.* 1998 Dec;21(6):317-26. X-2, X-3.
1570. Nistal M, Garcia-Cabezas MA, Castello MC, et al. Age-related epididymis-like intratesticular structures: benign lesions of Wolffian origin that can be misdiagnosed as testicular tumors. *J Androl.* 2006 Jan-Feb;27(1):79-85. X-2, X-3.
1571. Nistal M, Garcia-Rodeja E and Paniagua R. Granular transformation of Sertoli cells in testicular disorders. *Hum Pathol.* 1991 Feb;22(2):131-7. X-2, X-3.
1572. Nistal M, Gonzalez-Peramato P and De Miguel MP. Immunodetection of inhibin in the human testis and epididymis during normal development and in non-tumoural testicular lesions. *Reprod Fertil Dev.* 2010;22(3):558-63. X-2, X-3.
1573. Nistal M, Gonzalez-Peramato P and Paniagua R. Diagnostic value of differential quantification of spermatids in obstructive azoospermia. *J Androl.* 2003 Sep-Oct;24(5):721-6. X-2, X-3.
1574. Nistal M, Jimenez F and Paniagua R. Sertoli cell types in the Sertoli-cell-only syndrome: Relationships between Sertoli cell morphology and aetiology. *Histopathology.* 1990;16 (2):173-180. X-3.
1575. Nistal M, Jimenez-Heffernan JA, Garcia-Viera M, et al. Cystic transformation and calcium oxalate deposits in rete testis and efferent ducts in dialysis patients. *Hum Pathol.* 1996 Apr;27(4):336-41. X-2, X-3.
1576. Nistal M, Mate A and Paniagua R. Cystic transformation of the rete testis. *American Journal of Surgical Pathology.* 1996 Oct;20 (10):1231-1239. X-2, X-3.
1577. Nistal M, Mate A and Paniagua R. Granulomatous epididymal lesion of possible ischemic origin. *Am J Surg Pathol.* 1997 Aug;21(8):951-6. X-2, X-3.
1578. Nistal M and Paniagua R. Infertility in adult males with retractile testes. *Fertil Steril.* 1984 Mar;41(3):395-403. X-2, X-3.
1579. Nistal M and Paniagua R. Occurrence of primary spermatocytes in the infant and child testis. *Andrologia.* 1984 Nov-Dec;16(6):532-6. X-2, X-3.
1580. Nistal M, Paniagua R, Abaurrea MA, et al. Hyperplasia and the immature appearance of Sertoli cells in primary testicular disorders. *Hum Pathol.* 1982 Jan;13(1):3-12. X-2, X-3.
1581. Nistal M, Paniagua R and Diez-Pardo JA. Histologic classification of undescended testes. *Hum Pathol.* 1980 Nov;11(6):666-74. X-3, X-4, X-5, X-6.
1582. Nistal M, Paniagua R, Leon L, et al. Ectopic seminiferous tubules in the tunica albuginea of normal and dysgenetic testes. *Appl Pathol.* 1985;3(3):123-8. X-2, X-3.
1583. Nistal M, Paniagua R and Queizan A. Histologic lesions in undescended ectopic obstructed testes. *Fertil Steril.* 1985 Mar;43(3):455-62. X-3.
1584. Nistal M, Paniagua R, Regadera J, et al. Hyperplasia of spermatic cord nerves: a sign of testicular absence. *Urology.* 1987 Apr;29(4):411-5. X-3.
1585. Nistal M, Riestra ML, Galmes-Belmonte I, et al. Testicular biopsy in patients with obstructive azoospermia. *Am J Surg Pathol.* 1999 Dec;23(12):1546-54. X-2, X-3.
1586. Nistal M, Riestra ML and Paniagua R. Correlation between testicular biopsies (prepubertal and postpubertal) and spermiogram in cryptorchid men. *Hum Pathol.* 2000 Sep;31(9):1022-30. X-3, X-4, X-5, X-6.
1587. Nistal M, Riestra ML and Paniagua R. Focal orchitis in undescended testes: discussion of pathogenetic mechanisms of tubular atrophy. *Arch Pathol Lab Med.* 2002 Jan;126(1):64-9. X-2, X-3.
1588. Nixon RG, Pope JcT, Adams MC, et al. Laparoscopic variability of the internal inguinal ring: review of anatomical variation in children with and without a patent processus vaginalis. *J Urol.* 2002 Apr;167(4):1818-20. X-2, X-3.
1589. Niyogi A, Tahim AS, Sherwood WJ, et al. A comparative study examining open inguinal herniotomy with and without hernioscopy to laparoscopic inguinal hernia repair in a pediatric population. *Pediatr Surg Int.* 2010 Apr;26(4):387-92. X-2, X-3.
1590. Nocchioli B and Pampaloni A. Refluent testicular autotransplantation by Domini's method: Personal experience with seven pediatric patients. *Pediatric Surgery International.* 1995;10 (5-6):356-358. X-4, X-5, X-6.

1591. Noe HN, Peeden JN, Jerkins GR, et al. Hypertelorism-hypospadias syndrome. *J Urol*. 1984 Nov;132(5):951-2. X-2, X-3.
1592. Nogales FF, Jr., Toro M, Ortega I, et al. Bilateral incipient germ cell tumours of the testis in the incomplete testicular feminization syndrome. *Histopathology*. 1981 Sep;5(5):511-5. X-2, X-3.
1593. Nojima M, Taguchi T, Ando Y, et al. Huge seminoma developed in a patient with testicular feminization. *J Obstet Gynaecol Res*. 2004 Apr;30(2):109-12. X-2, X-3.
1594. Nonomura N, Aozasa K, Ueda T, et al. Malignant lymphoma of the testis: histological and immunohistological study of 28 cases. *J Urol*. 1989 Jun;141(6):1368-71. X-2, X-3.
1595. Noonan JA. Noonan syndrome and related disorders. *Progress in Pediatric Cardiology*. 2005 Jul;20 (2):177-185. X-1, X-2, X-3.
1596. Nord C, Bjoro T, Ellingsen D, et al. Gonadal hormones in long-term survivors 10 years after treatment for unilateral testicular cancer. *Eur Urol*. 2003 Sep;44(3):322-8. X-2, X-3.
1597. Nordenskjold A, Friedman E, Tapper-Persson M, et al. Screening for mutations in candidate genes for hypospadias. *Urol Res*. 1999;27(1):49-55. X-2, X-3.
1598. Noroes J and Dreyer G. A mechanism for chronic filarial hydrocele with implications for its surgical repair. *PLoS Negl Trop Dis*. 2010;4(6):e695. X-2, X-3.
1599. North MO, Lellei I, Erdei E, et al. Meiotic studies of infertile men in case of non-obstructive azoospermia with normal karyotype and no microdeleted Y-chromosome precise the clinical couple management. *Ann Genet*. 2004 Apr-Jun;47(2):113-23. X-2, X-3.
1600. North MO, Lellei I, Rives N, et al. Reversible meiotic abnormalities in azoospermic men with bilateral varicocele after microsurgical correction. *Cell Mol Biol (Noisy-le-grand)*. 2004 May;50(3):281-9. X-2, X-3.
1601. Northen AT, Norman GS, Anderson K, et al. Follow-up of children exposed in utero to 17 alpha-hydroxyprogesterone caproate compared with placebo. *Obstetrics and Gynecology*. 2007 Oct;110 (4):865-872. X-2, X-3.
1602. Noseworthy J. Recurrent undescended testes. *Seminars in Pediatric Surgery*. 2003 May;12 (2):90-93. X-1.
1603. Nouria F, Ahmed YB, Jliidi S, et al. Management of perineal ectopic testes. *Tunisie Medicale*. 2011 January;89 (1):47-49. X-4, X-5, X-6.
1604. Novotny DA, Klein RL and Boeckman CR. Gastroschisis: an 18-year review. *J Pediatr Surg*. 1993 May;28(5):650-2. X-2, X-3.
1605. Nowroozi MR, Radkhan K, Ranjbaran A, et al. Is karyotyping and Y chromosome microdeletion study necessary in men candidate for ICSI? *Iranian Journal of Reproductive Medicine*. 2010;8 (4):173-178. X-3.
1606. Nuininga JE, RP DEG, Verschuren R, et al. Long-term outcome of different types of 1-stage hypospadias repair. *J Urol*. 2005 Oct;174(4 Pt 2):1544-8; discussion 1548. X-2, X-3.
1607. Nuti F, Marinari E, Erdei E, et al. The leucine-rich repeat-containing G protein-coupled receptor 8 gene T222P mutation does not cause cryptorchidism. *J Clin Endocrinol Metab*. 2008 Mar;93(3):1072-6. X-3.
1608. Ocal G, Adiyaman P, Berberoglu M, et al. Mutations of the 5alpha-steroid reductase type 2 gene in six Turkish patients from unrelated families and a large pedigree of an isolated Turkish village. *J Pediatr Endocrinol Metab*. 2002 Apr;15(4):411-21. X-2, X-3.
1609. Odabas O, Ugras S, Yilmaz Y, et al. Testicular needle biopsy: is it a safe and adequate method? *Int Urol Nephrol*. 1997;29(5):591-5. X-3.
1610. Oerter R and Kaiser D. Pulmonary metastases principles and strategies of surgical treatment. *Acta Chirurgica Austriaca*. 1996;28 (1):23-27. X-2, X-3.
1611. Oesterwitz H and Fahlenkamp D. Microsurgical technique and results of testicular autotransplantation in children - Essential venous anastomosis. *International Urology and Nephrology*. 1993;25 (6):587-593. X-1, X-2, X-3.
1612. Oguzkurt P, Kayaselcuk F, Tuncer I, et al. Evaluation of extracellular matrix protein composition in sacs associated with undescended testis, hydrocele, inguinal hernia, and peritoneum. *Urology*. 2007 Aug;70(2):346-50. X-2, X-3.
1613. Ohyama C, Chiba Y, Yamazaki T, et al. Lymphatic mapping and gamma probe guided laparoscopic biopsy of sentinel lymph node in patients with clinical stage I testicular tumor. *J Urol*. 2002 Oct;168(4 Pt 1):1390-5. X-2, X-3.
1614. Ohyama C, Kyan A, Satoh M, et al. Bilateral testicular tumors: A report of nine cases with long-term follow-up. *International Journal of Urology*. 2002;9 (3):173-177. X-2, X-3.
1615. Okada H, Yoshimura K, Fujioka H, et al. Assisted reproduction technology for patients with congenital bilateral absence of vas deferens. *J Urol*. 1999 Apr;161(4):1157-62. X-2, X-3.
1616. Okeke AA and Osegbe DN. Prevalence and characteristics of cryptorchidism in a Nigerian district. *BJU Int*. 2001 Dec;88(9):941-5. X-2, X-3.
1617. Okten G, Kara N, Gunes S, et al. A retrospective study in cases with sex chromosome anomaly in samsun and around. *Turkiye Klinikleri Journal of Medical Sciences*. 2009;29 (3):643-647. X-2, X-3.
1618. Okunribido O, Ladipo JK and Ajao OG. Inguinal hernia in paediatric age-group: Ibadan experience. *East Afr Med J*. 1992 Jun;69(6):347-8. X-2, X-3.

1619. Okur H and Gough DC. Management of mullerian duct remnants. *Urology*. 2003 Mar;61(3):634-7; discussion 637. X-3.
1620. Okur H, Kucukaydin M, Kazez A, et al. Ectopic adrenal tissue in the inguinal region in children. *Pediatric Pathology and Laboratory Medicine*. 1995;15 (5):763-767. X-2, X-3.
1621. Okuyama A, Itatani H, Mizutani S, et al. Factors affecting fertility after varicocelectomy. *Eur Urol*. 1980;6(4):214-7. X-2, X-3.
1622. Okuyama A, Koh E, Kondoh N, et al. Plasminogen activator in cultured cells of human undescended testis. *Urol Int*. 1991;46(4):324-8. X-3, X-4, X-5, X-6.
1623. Okuyama A, Koide T, Itatani H, et al. Pituitary-gonadal function in schoolboys with varicocele and indications of varicocelectomy. *Eur Urol*. 1981;7(2):92-6. X-2, X-3.
1624. Olea N, Olea-Serrano F, Lardelli-Claret P, et al. Inadvertent exposure to xenoestrogens in children. *Toxicol Ind Health*. 1999 Jan-Mar;15(1-2):151-8. X-1, X-2, X-3.
1625. O'Leary MP, Gee WF, Holtgrewe HL, et al. 1999 American Urological Association Gallup Survey: changes in physician practice patterns, treatment of incontinence and bladder cancer, and impact of managed care. *J Urol*. 2000 Oct;164(4):1311-6. X-2, X-3.
1626. Olesen IA, Hoei-Hansen CE, Skakkebaek NE, et al. Testicular carcinoma in situ in subfertile Danish men. *Int J Androl*. 2007 Aug;30(4):406-11; discussion 412. X-2, X-3.
1627. Oliva A, Spira A and Multigner L. Contribution of environmental factors to the risk of male infertility. *Hum Reprod*. 2001 Aug;16(8):1768-76. X-2, X-3.
1628. Olk RJ, Halperin LS, Soubrane G, et al. Fluorescein angiography--is it safe to use in a pregnant patient? *Eur J Ophthalmol*. 1991 Apr-Jun;1(2):103-6. X-2, X-3.
1629. Olsen LH. Inter-observer variation in assessment of undescended testis. Analysis of kappa statistics as a coefficient of reliability. *Br J Urol*. 1989 Dec;64(6):644-8. X-3.
1630. Olsson H, Bladstrom A and Alm P. Male gynecomastia and risk for malignant tumours--a cohort study. *BMC Cancer*. 2002 Oct 16;2:26. X-2, X-3.
1631. Omar S, Eissa S, Nasser H, et al. Retroperitoneal block dissection in the treatment of nonseminomatous tumors of the testis. *Arch Androl*. 1980 Nov;5(3):279-85. X-2, X-3.
1632. Ondrus D, Hornak M and Mat'oska J. Bilateral testicular germ-cell tumors--a single centre long-term experience. *Int Urol Nephrol*. 2001;33(3):521-4. X-2, X-3.
1633. Ondrus D, Matoska J and Hornak M. Bilateral germ cell tumors of the testis. *Neoplasma*. 1993;40(5):329-32. X-2, X-3.
1634. Ondrusova M and Ondrus D. Testicular cancer epidemiology in the Slovak Republic. *International Journal of Cancer Prevention*. 2008 May;2 (5):375-386. X-3.
1635. Ondrusova M and Ondrus D. Epidemiological features of testicular cancer in the Slovak Republic--retrospective study. *Klin Onkol*. 2009;22(2):52-7. X-2, X-3.
1636. Ondrusova M, Ondrus D, Dusek L, et al. Damage of hormonal function and bone metabolism in long-term survivors of testicular cancer. *Neoplasma*. 2009;56(6):473-9. X-2, X-3.
1637. O'Neill BP, Dinapoli RP, Kurtin PJ, et al. Occult systemic non-Hodgkin's lymphoma (NHL) in patients initially diagnosed as primary central nervous system lymphoma (PCNSL): how much staging is enough? *J Neurooncol*. 1995;25(1):67-71. X-2, X-3.
1638. Onol SY, Ilbey YO, Onol FF, et al. A novel pull-through technique for the surgical management of idiopathic hydrocele. *J Urol*. 2009 Mar;181(3):1201-5. X-2, X-3.
1639. Opitz JM. Hypospadias. *American Journal of Medical Genetics*. [Journal]. 1985;21 (1):57-60. X-1, X-2, X-3.
1640. Opitz JM. G syndrome (hyperteloeism with esophageal abnormality and hypospadias, or hypospadias-dysphagia, or 'Opitz-Frias' or 'Optiz-G' syndrome) - Perspective in 1987 and bibliography. *American Journal of Medical Genetics*. [Journal]. 1987;28 (2):275-285. X-3.
1641. Orlando C, Santoro S, Calabro C, et al. Spermatic and peripheral venous plasma concentrations of immunoreactive inhibin in prepubertal boys with undescended testis and in pubertal boys with varicocele. *Acta Endocrinol (Copenh)*. 1992 Nov;127(5):385-91. X-3.
1642. Ornstein DK, Smith DS and Andriole GL. Biochemical response to testicular androgen ablation among patients with prostate cancer for whom flutamide and/or finasteride therapy failed. *Urology*. 1998 Dec;52(6):1094-7. X-2, X-3.
1643. Ortega JJ, Javier G and Toran N. Testicular infiltrates in children with acute lymphoblastic leukemia: a prospective study. *Med Pediatr Oncol*. 1984;12(6):386-93. X-2, X-3.
1644. Orvis BR, Bottles K and Kogan BA. Testicular histology in fetuses with the prune belly syndrome and posterior urethral valves. *J Urol*. 1988 Feb;139(2):335-7. X-3.
1645. Osegbe DN. Testicular function after unilateral bacterial epididymo-orchitis. *European Urology*. 1991;19 (3):204-208. X-2, X-3.
1646. Osegbe DN and Amaku EO. The causes of male infertility in 504 consecutive Nigerian patients. *Int Urol Nephrol*. 1985;17(4):349-58. X-2, X-3.
1647. O'Shaughnessy PJ, Monteiro A, Verhoeven G, et al. Occurrence of testicular microlithiasis in androgen insensitive hypogonadal mice. *Reprod Biol Endocrinol*. 2009;7:88. X-2, X-3.

1648. Oshima H, Higashi Y and Hatakeyama S. Histochemical location of 17 beta-hydroxysteroid oxidoreductase in the adult and infantile human testis. *Endocrinol Jpn.* 1983 Jun;30(3):367-72. X-3, X-4, X-5, X-6.
1649. Osterlind A, Berthelsen JG, Abildgaard N, et al. Risk of bilateral testicular germ cell cancer in Denmark: 1960-1984. *J Natl Cancer Inst.* 1991 Oct 2;83(19):1391-5. X-2, X-3.
1650. Osterlind A, Berthelsen JG, Abildgaard N, et al. Incidence of bilateral testicular germ cell cancer in Denmark, 1960-84: preliminary findings. *Int J Androl.* 1987 Feb;10(1):203-8. X-2, X-3.
1651. Ottesen AM, Kirchoff M, De-Meyts ER, et al. Detection of chromosomal aberrations in seminomatous germ cell tumours using comparative genomic hybridization. *Genes Chromosomes Cancer.* 1997 Dec;20(4):412-8. X-2, X-3.
1652. Ozan H, Gumusalan Y, Onderoglu S, et al. High origin of gonadal arteries associated with other variations. *Annals of Anatomy.* 1995;177 (2):157-160. X-2, X-3.
1653. Ozel SK, Kazez A and Akpolat N. Presence of ectopic adrenocortical tissues in inguinoscrotal region suggests an association with undescended testis. *Pediatr Surg Int.* 2007 Feb;23(2):171-5. X-2, X-3.
1654. Ozen H, Ayhan A, Esen A, et al. Histopathological changes in adult cryptorchid testes. *Br J Urol.* 1989 May;63(5):520-1. X-3.
1655. Ozturk A, Ozturk E, Zeyrek F, et al. Comparison of brucella and non-specific epididymorchitis: gray scale and color Doppler ultrasonographic features. *Eur J Radiol.* 2005 Nov;56(2):256-62. X-2, X-3.
1656. Padron RS. Semen biochemistry studies in men with macro-orchidism. *Int J Fertil.* 1986 Mar-Apr;31(1):56-8. X-2, X-3.
1657. Paick J, Kim SH and Kim SW. Ejaculatory duct obstruction in infertile men. *BJU Int.* 2000 Apr;85(6):720-4. X-2, X-3.
1658. Pajulo OT, Pulkki KJ, Alanen MS, et al. Duration of surgery and patient age affect wound healing in children. *Wound Repair Regen.* 2000 May-Jun;8(3):174-8. X-2, X-3.
1659. Pallapies D. Trends in childhood disease. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis.* 2006 28 Sep;608 (2):100-111. X-3.
1660. Palmer JM. The undescended testicle. *Endocrinology and Metabolism Clinics of North America.* 1991;20 (1):231-240. X-1, X-2, X-3.
1661. Palmer JR, Herbst AL, Noller KL, et al. Urogenital abnormalities in men exposed to diethylstilbestrol in utero: A cohort study. *Environmental Health: A Global Access Science Source.* 2009;8 (1)(37). X-3.
1662. Palmieri G, Lotrecchiano G, Ricci G, et al. Gonadal function after multimodality treatment in men with testicular germ cell cancer. *Eur J Endocrinol.* 1996 Apr;134(4):431-6. X-2, X-3.
1663. Paltiel HJ, Rupich RC and Babcock DS. Maturation changes in arterial impedance of the normal testis in boys: Doppler sonographic study. *AJR Am J Roentgenol.* 1994 Nov;163(5):1189-93. X-2, X-3.
1664. Pamber B, De Bono JS, Brown IL, et al. Bilateral testicular cancer: a preventable problem? Experience from a large cancer centre. *BJU Int.* 2003 Jul;92(1):43-6. X-2, X-3.
1665. Pan BSA, Ooi LLPJ and Mack POP. Laparoscopic assessment and orchidectomy for the undescended testis. *Australian and New Zealand Journal of Surgery.* 1994;64 (2):118-120. X-4, X-5, X-6.
1666. Panagiotopoulou K, Katsouyanni K, Petridou E, et al. Maternal age, parity, and pregnancy estrogens. *Cancer Causes Control.* 1990 Sep;1(2):119-24. X-2, X-3.
1667. Paniagua R, Martinez-Onsurbe P, Santamaria L, et al. Quantitative and ultrastructural alterations in the lamina propria and Sertoli cells in human cryptorchid testes. *Int J Androl.* 1990 Dec;13(6):470-87. X-3.
1668. Paniagua R, Nistal M and Bravo MP. Leydig cell types in primary testicular disorders. *Hum Pathol.* 1984 Feb;15(2):181-90. X-2, X-3.
1669. Panidis D, Matalliotakis I, Papathanasiou K, et al. The sperm deformity and the sperm multiple anomalies indexes in patients who underwent unilateral orchectomy and preventive radiotherapy. *Eur J Obstet Gynecol Reprod Biol.* 1998 Oct;80(2):247-50. X-2, X-3.
1670. Papachristou EA, Mitselou MF and Finokaliotis ND. Surgical outcome and hospital cost analyses of laparoscopic and open tension-free hernia repair. *Hernia.* 2002 Jul;6(2):68-72. X-2, X-3.
1671. Papadimas J, Goulis DG, Sotiriades A, et al. Interleukin-1 beta and tumor necrosis factor-alpha in normal/infertile men. *Arch Androl.* 2002 Mar-Apr;48(2):107-13. X-2, X-3.
1672. Papanikolaou F, Chow V, Jarvi K, et al. Effect of adult microsurgical varicocelectomy on testicular volume. *Urology.* 2000 Jul;56(1):136-9. X-2, X-3.
1673. Papp G. Operative andrology. *Hum Reprod.* 1988 Apr;3(3):357-63. X-3.
1674. Papp Z, Toth-Pal E, Papp C, et al. Impact of prenatal mid-trimester screening on the prevalence of fetal structural anomalies: a prospective epidemiological study. *Ultrasound Obstet Gynecol.* 1995 Nov;6(5):320-6. X-2, X-3.
1675. Parekattil S, Sijo J, Atalah H, et al. *Journal of Endourology.* [Conference Abstract]. 2009 October;Conference: 27th WCE 2009 Munich Germany. Conference Start: 20091006 Conference End: 20091010. Conference: 27th WCE 2009 Munich Germany. Conference Start: 20091006 Conference End: 20091010. Conference Publication: (var.pagings). 23:A218. X-2, X-3.
1676. Parekar SV, Oak S, Gupta R, et al. Laparoscopic inguinal hernia repair in the pediatric age group--experience with 437 children. *J Pediatr Surg.* 2010 Apr;45(4):789-92. X-2, X-3.

1677. Paris F, Jeandel C, Servant N, et al. Increased serum estrogenic bioactivity in three male newborns with ambiguous genitalia: a potential consequence of prenatal exposure to environmental endocrine disruptors. *Environ Res*. 2006 Jan;100(1):39-43. X-2, X-3.
1678. Paris F, Servant N, Terouanne B, et al. Evaluation of androgenic bioactivity in human serum by recombinant cell line: preliminary results. *Mol Cell Endocrinol*. 2002 Dec 30;198(1-2):123-9. X-2, X-3.
1679. Park DS, Prow DM, Amato RJ, et al. Clinical characteristics of metachronous bilateral testicular tumors in the chemotherapeutic era. *Yonsei Med J*. 1999 Apr;40(2):137-43. X-2, X-3.
1680. Park KH, Lee JH, Han JJ, et al. Histological evidences suggest recommending orchiopexy within the first year of life for children with unilateral inguinal cryptorchid testis. *Int J Urol*. 2007 Jul;14(7):616-21. X-3.
1681. Park SW, Kim TN, Lee W, et al. Umbilical laparoendoscopic single site surgery versus inguinal varicocelectomy for bilateral varicocele: A comparative study. *International Journal of Urology*. 2011 March;18(3):250-254. X-3.
1682. Parkhouse H and Hendry WF. Vasal injuries during childhood and their effect on subsequent fertility. *Br J Urol*. 1991 Jan;67(1):91-5. X-3.
1683. Pasqualotto FF, Lucon AM, de Goes PM, et al. Is it worthwhile to operate on subclinical right varicocele in patients with grade II-III varicocele in the left testicle? *J Assist Reprod Genet*. 2005 May;22(5):227-31. X-2, X-3.
1684. Pasqualotto FF, Pasqualotto EB, Agarwal A, et al. Detection of testicular cancer in men presenting with infertility. *Rev Hosp Clin Fac Med Sao Paulo*. 2003 Mar-Apr;58(2):75-80. X-2, X-3.
1685. Pasqualotto FF, Pasqualotto EB, Sobreiro BP, et al. Clinical diagnosis in men undergoing infertility investigation in a university hospital. *Urol Int*. 2006;76(2):122-5. X-2, X-3.
1686. Passman C, Urban D, Klemm K, et al. Testicular lesions other than germ cell tumours: feasibility of testis-sparing surgery. *BJU Int*. 2009 Feb;103(4):488-91. X-2, X-3.
1687. Patel PJ and Pareek SS. Scrotal ultrasound in male infertility. *Eur Urol*. 1989;16(6):423-5. X-2, X-3.
1688. Patel SR and Caldamone AA. Sir Denis Browne: Contributions to pediatric urology. *Journal of Pediatric Urology*. 2010;6(5):496-500. X-1, X-2, X-3.
1689. Patel SR, Richardson RL and Kvols L. Synchronous and metachronous bilateral testicular tumors. Mayo Clinic experience. *Cancer*. 1990 Jan 1;65(1):1-4. X-2, X-3.
1690. Patel SR and Sigman M. Comparison of outcomes of vasovasostomy performed in the convoluted and straight vas deferens. *J Urol*. 2008 Jan;179(1):256-9. X-2, X-3.
1691. Payne K, Heydenrych JJ, Martins M, et al. Caudal block for analgesia after paediatric inguinal surgery. *S Afr Med J*. 1987 Nov 7;72(9):629-30. X-4, X-5, X-6.
1692. Paz A and Melloul M. Comparison of radionuclide scrotal blood-pool index versus gonadal venography in the diagnosis of varicocele. *J Nucl Med*. 1998 Jun;39(6):1069-74. X-2, X-3.
1693. Pearce I, Islam S, McIntyre IG, et al. Suspected testicular torsion: a survey of clinical practice in North West England. *J R Soc Med*. 2002 May;95(5):247-9. X-2, X-3.
1694. Pearl MS and Hill MC. Ultrasound of the Scrotum. *Seminars in Ultrasound, CT and MRI*. 2007 Aug;28(4):225-248. X-1, X-2, X-3.
1695. Pearce I, Glick RD, Abramson SJ, et al. Testicular-sparing surgery for benign testicular tumors. *J Pediatr Surg*. 1999 Jun;34(6):1000-3. X-2, X-3.
1696. Pecile V and Filippi G. Screening for fra(x) mutation and Klinefelter syndrome in mental institutions. *Clin Genet*. 1991 Mar;39(3):189-93. X-3.
1697. Pedersen KV, Boiesen P and Zetterlund CG. Experience of screening for carcinoma-in-situ of the testis among young men with surgically corrected maldescended testes. *Int J Androl*. 1987 Feb;10(1):181-5. X-2, X-3.
1698. Pekindil G, Huseyin Atakan I, Kaya E, et al. Bilateral synchronous granulomatous orchitis: gray-scale and colour Doppler sonographic findings. *Eur J Radiol*. 1999 Sep;31(3):201-3. X-2, X-3.
1699. Pelliccione F, Cordeschi G, Giuliani V, et al. The contractile wall of the caput epididymidis in men affected by congenital or postinflammatory obstructive azoospermia. *J Androl*. 2004 May-Jun;25(3):417-25. X-2, X-3.
1700. Pena-Alonso R, Nieto K, Alvarez R, et al. Distribution of Y-chromosome-bearing cells in gonadoblastoma and dysgenetic testis in 45,X/46,XY infants. *Modern Pathology*. 2005 Mar;18(3):439-445. X-2, X-3.
1701. Pepe P, Panella P, Pennisi M, et al. Does color Doppler sonography improve the clinical assessment of patients with acute scrotum? *Eur J Radiol*. 2006 Oct;60(1):120-4. X-3.
1702. Pereira RM, Tatsuo ES, Simoes e Silva AC, et al. New method of surgical delayed closure of giant omphaloceles: Lazaro da Silva's technique. *J Pediatr Surg*. 2004 Jul;39(7):1111-5. X-2, X-3.
1703. Perez-Guillermo M and Sola Perez J. Aspiration cytology of palpable lesions of the scrotal content. *Diagn Cytopathol*. 1990;6(3):169-77. X-3.
1704. Peri G, Farina F, Marciano V, et al. Clinical and anatomic features of the inguinal canal during hernia. *Ital J Anat Embryol*. 1996 Apr-Jun;101(2):69-80. X-2, X-3.
1705. Perraguin-Jayot S, Audebert A, Emperaire JC, et al. Ongoing pregnancies after intracytoplasmic injection using cryopreserved testicular spermatozoa. *Hum Reprod*. 1997 Dec;12(12):2706-9. X-2, X-3.
1706. Perrin P, Rollet J and Durand L. The Doppler stethoscope in the diagnosis of subclinical varicocele. *Br J Urol*. 1980 Oct;52(5):390-1. X-2, X-3.

1707. Peschel R, Gettman MT, Steiner H, et al. Management of adult Leydig-cell testicular tumors: assessing the role of laparoscopic retroperitoneal lymph node dissection. *J Endourol.* 2003 Nov;17(9):777-80. X-2, X-3.
1708. Petersen HD, Abildgaard U, Daugaard G, et al. Psychological and physical long-term effects of torture. A follow-up examination of 22 Greek persons exposed to torture 1967-1974. *Scand J Soc Med.* 1985;13(3):89-93. X-2, X-3.
1709. Petersen PM, Andersson AM, Rorth M, et al. Undetectable inhibin B serum levels in men after testicular irradiation. *J Clin Endocrinol Metab.* 1999 Jan;84(1):213-5. X-2, X-3.
1710. Petersen PM, Giwercman A, Daugaard G, et al. Effect of graded testicular doses of radiotherapy in patients treated for carcinoma-in-situ in the testis. *J Clin Oncol.* 2002 Mar 15;20(6):1537-43. X-2, X-3.
1711. Petersen PM and Hansen SW. The course of long-term toxicity in patients treated with cisplatin- based chemotherapy for non-seminomatous germ-cell cancer. *Annals of Oncology.* 1999;10 (12):1475-1483. X-2, X-3.
1712. Peterson AC, Bauman JM, Light DE, et al. The prevalence of testicular microlithiasis in an asymptomatic population of men 18 to 35 years old. *J Urol.* 2001 Dec;166(6):2061-4. X-2, X-3.
1713. Petreschi F, Digilio MC, Marino B, et al. Prevalence of major malformations in infants with Down's syndrome. *Italian Journal of Pediatrics.* 2002 Dec;28 (6):488-493. X-2, X-3.
1714. Petrescu A, Dobre C, Vasilica M, et al. Primary malignant lymphoma of the testis. *Rom J Morphol Embryol.* 2005;46(2):83-6. X-2, X-3.
1715. Pettus JA, Carver BS, Masterson T, et al. Preservation of ejaculation in patients undergoing nerve-sparing postchemotherapy retroperitoneal lymph node dissection for metastatic testicular cancer. *Urology.* 2009 Feb;73(2):328-31; discussion 331-2. X-2, X-3.
1716. Pharris-Ciurej ND, Cook LS and Weiss NS. Incidence of testicular cancer in the United States: has the epidemic begun to abate? *Am J Epidemiol.* 1999 Jul 1;150(1):45-6. X-2, X-3.
1717. Phelps S and Agrawal M. Morbidity after neonatal inguinal herniotomy. *J Pediatr Surg.* 1997 Mar;32(3):445-7. X-2, X-3.
1718. Philibert P, Audran F, Pienkowski C, et al. Complete androgen insensitivity syndrome is frequently due to premature stop codons in exon 1 of the androgen receptor gene: an international collaborative report of 13 new mutations. *Fertil Steril.* 2010 Jul;94(2):472-6. X-2, X-3.
1719. Philip J, Selvan D and Desmond AD. Mumps orchitis in the non-immune postpubertal male: a resurgent threat to male fertility? *BJU Int.* 2006 Jan;97(1):138-41. X-2, X-3.
1720. Phillips G, Kumari-Subaiya S and Sawitsky A. Ultrasonic evaluation of the scrotum in lymphoproliferative disease. *J Ultrasound Med.* 1987 Apr;6(4):169-75. X-2, X-3.
1721. Phillipson GT, Petrucco OM and Matthews CD. Congenital bilateral absence of the vas deferens, cystic fibrosis mutation analysis and intracytoplasmic sperm injection. *Hum Reprod.* 2000 Feb;15(2):431-5. X-2, X-3.
1722. Picarro C, Tatsuo ES, Amaral VF, et al. Morphological comparison of processus vaginalis from boys with undescended testis and hernia sacs from boys with inguinal hernia. *Eur J Pediatr Surg.* 2009 Jun;19(3):145-7. X-3, X-4, X-5, X-6.
1723. Picone S and Paolillo P. Neonatal outcomes in a population of late-preterm infants. *Journal of Maternal-Fetal and Neonatal Medicine.* 2010 October;23 (SUPPL. 3):116-120. X-3.
1724. Pieri S, Agresti P, Morucci M, et al. [A transbranchial approach for the percutaneous therapy of pediatric varicocele]. *Radiol Med.* 2003 Sep;106(3):221-31. X-2, X-3.
1725. Pierik FH, Burdorf A, De Muinck Keizer-Schrama SMPF, et al. The cryptorchidism prevalence among infants in the general population of Rotterdam, the Netherlands. *International Journal of Andrology.* 2005 Aug;28 (4):248-252. X-3.
1726. Pierik FH, Burdorf A, Deddens JA, et al. Maternal and paternal risk factors for cryptorchidism and hypospadias: A case-control study in newborn boys. *Environmental Health Perspectives.* 2004 Nov;112 (15):1570-1576. X-3.
1727. Pierik FH, Vreeburg JT, Stijnen T, et al. Improvement of sperm count and motility after ligation of varicoceles detected with colour Doppler ultrasonography. *Int J Androl.* 1998 Oct;21(5):256-60. X-2, X-3.
1728. Pierik FH, Vreeburg JTM, Stijnen T, et al. Serum inhibin B as a marker of spermatogenesis. *Journal of Clinical Endocrinology and Metabolism.* 1998;83 (9):3110-3114. X-2, X-3.
1729. Pigneur B, Trivin C and Brauner R. Idiopathic central precocious puberty in 28 boys. *Med Sci Monit.* 2008 Jan;14(1):CR10-14. X-2, X-3.
1730. Pillai PL, McCracken SRC, Thomas DJ, et al. Is contralateral testicular biopsy warranted at the time of orchidectomy? *British Journal of Medical and Surgical Urology.* 2009 January;2 (1):17-21. X-3.
1731. Pintauro WL, Klein FA, Vick CW, 3rd, et al. The use of ultrasound for evaluating subacute unilateral scrotal swelling. *J Urol.* 1985 May;133(5):799-802. X-2, X-3.
1732. Pinto G, Abadie V, Mesnage R, et al. CHARGE syndrome includes hypogonadotropic hypogonadism and abnormal olfactory bulb development. *J Clin Endocrinol Metab.* 2005 Oct;90(10):5621-6. X-2, X-3.
1733. Pinto KJ, Kroovand RL and Jarow JP. Varicocele related testicular atrophy and its predictive effect upon fertility. *J Urol.* 1994 Aug;152(2 Pt 2):788-90. X-2, X-3.

1734. Pitteloud N, Meysing A, Quinton R, et al. Mutations in fibroblast growth factor receptor 1 cause Kallmann syndrome with a wide spectrum of reproductive phenotypes. *Mol Cell Endocrinol.* 2006 Jul 25;254-255:60-9. X-2, X-3.
1735. Pizzocaro G. Retroperitoneal lymphadenectomy in clinical stage I nonseminomatous germinal testis cancer. *Eur J Surg Oncol.* 1986 Mar;12(1):25-8. X-2, X-3.
1736. Pizzocaro G, Salvioni R and Zanoni F. Unilateral lymphadenectomy in intraoperative stage I nonseminomatous germinal testis cancer. *J Urol.* 1985 Sep;134(3):485-9. X-2, X-3.
1737. Pizzocaro G, Zanoni F, Salvioni R, et al. Surveillance or lymph node dissection in clinical stage I non-seminomatous germinal testis cancer? *Br J Urol.* 1985 Dec;57(6):759-62. X-2, X-3.
1738. Pizzocaro G, Zanoni F, Salvioni R, et al. Difficulties of a surveillance study omitting retroperitoneal lymphadenectomy in clinical stage I nonseminomatous germ cell tumors of the testis. *J Urol.* 1987 Dec;138(6):1393-6. X-2, X-3.
1739. Pizzorno R, Bonini F, Donelli A, et al. Blunt scrotal traumas. Ultrasound and immunological follow-up in fifteen years of experience at the urological clinic, Genoa. *Acta Urologica Italica.* 1997;11 (4):225-227. X-2, X-3.
1740. Plas E, Riedl CR, Engelhardt PF, et al. Unilateral or bilateral testicular biopsy in the era of intracytoplasmic sperm injection. *J Urol.* 1999 Dec;162(6):2010-3. X-2, X-3.
1741. Plata C, Algaba F, Andujar M, et al. Large cell calcifying Sertoli cell tumour of the testis. *Histopathology.* 1995;26 (3):255-259. X-2, X-3.
1742. Plevraki E, Kita M, Goulis DG, et al. Bilateral ovarian agenesis and the presence of the testis-specific protein 1-Y-linked gene: Two new features of Mayer-Rokitansky-Kuster-Hauser syndrome. *Fertility and Sterility.* 2004 Mar;81 (3):689-692. X-2, X-3.
1743. Plotton I, Sanchez P, Durand P, et al. Decrease of both stem cell factor and clusterin mRNA levels in testicular biopsies of azoospermic patients with constitutive or idiopathic but not acquired spermatogenic failure. *Hum Reprod.* 2006 Sep;21(9):2340-5. X-2, X-3.
1744. Podesta ML, Gottlieb S, Medel R, Jr., et al. Hormonal parameters and testicular volume in children and adolescents with unilateral varicocele: preoperative and postoperative findings. *J Urol.* 1994 Aug;152(2 Pt 2):794-7; discussion 798. X-2, X-3.
1745. Poenaru D and Fitzgerald P. Training general surgery residents in pediatric surgery: A Canadian survey. *J Pediatr Surg.* 2001 May;36(5):706-10. X-3.
1746. Politoff L, Hadziselimovic F, Herzog B, et al. Does hydrocele affect later fertility? *Fertil Steril.* 1990 Apr;53(4):700-3. X-2, X-3.
1747. Pombo M and Castro-Feijoo L. Endocrine disruptors. *Journal of Pediatric Endocrinology and Metabolism.* 2005 Dec;18 (SUPPL. 1):1145-1155. X-1, X-2, X-3.
1748. Ponchietti R, Grechi G and Dini G. Varicocele in adolescents: ultrastructural aspects. *Acta Eur Fertil.* 1986 Jan-Feb;17(1):47-50. X-2, X-3.
1749. Popek EJ. Embryonal remnants in inguinal hernia sacs. *Hum Pathol.* 1990 Mar;21(3):339-49. X-2, X-3.
1750. Popek EJ, Tyson RW, Miller GJ, et al. Prostate development in prune belly syndrome (PBS) and posterior urethral valves (PUV): etiology of PBS--lower urinary tract obstruction or primary mesenchymal defect? *Pediatr Pathol.* 1991 Jan-Feb;11(1):1-29. X-2, X-3.
1751. Portnoi MF, Lebas F, Gruchy N, et al. 22q11.2 Duplication syndrome: Two new familial cases with some overlapping features with DiGeorge/velocardiofacial syndromes. *American Journal of Medical Genetics.* 2005 15 Aug;137 A (1):47-51. X-2, X-3.
1752. Portuondo JA, Neyro JL, Barral A, et al. Management of phenotypic female patients with an XY karyotype. *J Reprod Med.* 1986 Jul;31(7):611-5. X-2, X-3.
1753. Pottern LM, Brown LM, Hoover RN, et al. Testicular cancer risk among young men: role of cryptorchidism and inguinal hernia. *J Natl Cancer Inst.* 1985 Feb;74(2):377-81. X-3.
1754. Poucell-Hatton S, Huang M, Bannykh S, et al. Fetal obstructive uropathy: patterns of renal pathology. *Pediatr Dev Pathol.* 2000 May-Jun;3(3):223-31. X-2, X-3.
1755. Poulakis V, Ferakis N, de Vries R, et al. Induction of spermatogenesis in men with azoospermia or severe oligoteratoasthenospermia after antegrade internal spermatic vein sclerotherapy for the treatment of varicocele. *Asian J Androl.* 2006 Sep;8(5):613-9. X-2, X-3.
1756. Pouplard A, Job JC, Luxembourger I, et al. Antigonadotropic cell antibodies in the serum of cryptorchid children and infants and of their mothers. *J Pediatr.* 1985 Jul;107(1):26-30. X-3.
1757. Pournabagher MA, Kilinc F, Guvel S, et al. Follow-up of testicular microlithiasis for subsequent testicular cancer development. *Urol Int.* 2005;74(2):108-12; discussion 113. X-2, X-3.
1758. Powell TM and Tarter TH. Management of nonpalpable incidental testicular masses. *J Urol.* 2006 Jul;176(1):96-8; discussion 99. X-2.
1759. Powers JM, DeCiero DP, Cox C, et al. The dorsal root ganglia in adrenomyeloneuropathy: Neuronal atrophy and abnormal mitochondria. *Journal of Neuropathology and Experimental Neurology.* 2001 May;60 (5):493-501. X-2, X-3.

1760. Powers JM, Moser HW, Moser AB, et al. Fetal cerebrohepatorenal (Zellweger) syndrome: dysmorphic, radiologic, biochemical, and pathologic findings in four affected fetuses. *Hum Pathol.* 1985 Jun;16(6):610-20. X-2, X-3.
1761. Pow-Sang JE, Benavente V and Pow-Sang JM. Management of yolk sac carcinoma of the testis clinical stage I: lymphadenectomy vs. no lymphadenectomy. *Prog Clin Biol Res.* 1989;303:791-8. X-2, X-3.
1762. Poyrazoglu S, Saka N, Agayev A, et al. Prevalence of testicular microlithiasis in males with congenital adrenal hyperplasia and its association with testicular adrenal rest tumors. *Horm Res Paediatr.* 2010;73(6):443-8. X-2, X-3.
1763. Pozza D, D'Ottavio G, Masci P, et al. Left varicocele at puberty. *Urology.* 1983 Sep;22(3):271-4. X-2, X-3.
1764. Pozza D, Gregori A and Pulone M. Surgical treatment of varicocele at adolescence. *Acta Chir Hung.* 1994;34(3-4):263-6. X-2, X-3.
1765. Pozza D, Versaci C and Antinori S. Azoospermia. Surgical perspectives. *Acta Chir Hung.* 1994;34(3-4):267-71. X-2, X-3.
1766. Pracki W. Laparoscopic and endoscopic inguinal hernia repair. [Polish, English]. *Polski Przegląd Chirurgiczny.* 2002;74 (12):1145-1156. X-2, X-3.
1767. Prater JM and Overdorf BS. Testicular torsion: A surgical emergency. *American Family Physician.* 1991;44 (3):834-840. X-1, X-2, X-3.
1768. Preiksa RT, Zilaitiene B, Matulevicius V, et al. Higher than expected prevalence of congenital cryptorchidism in Lithuania: a study of 1204 boys at birth and 1 year follow-up. *Hum Reprod.* 2005 Jul;20(7):1928-32. X-3.
1769. Preston Smith D, Felker RE, Norman Noe H, et al. Prenatal diagnosis of genital anomalies. *Urology.* 1996 Jan;47 (1):114-117. X-2, X-3.
1770. Prince FP, Palmer NF and Newton WA. Ultrastructural criteria in evaluating leukemic infiltration in prepubertal testicular biopsies. *Pediatr Pathol.* 1986;5(1):17-29. X-2, X-3.
1771. Proud VK, Levine C and Carpenter NJ. New X-linked syndrome with seizures, acquired micrencephaly, and agenesis of the corpus callosum. *American Journal of Medical Genetics.* 1992;43 (1-2):458-466. X-3.
1772. Przewratil P, Paduch DA, Kobos J, et al. Expression of estrogen receptor alpha and progesterone receptor in children with undescended testicle previously treated with human chorionic gonadotropin. *J Urol.* 2004 Sep;172(3):1112-6. X-3, X-4, X-5, X-6.
1773. Puhse G, Wachsmuth JU, Kemper S, et al. Phantom testis syndrome: prevalence, phenomenology and putative mechanisms. *Int J Androl.* 2010 Feb;33(1):e216-20. X-2, X-3.
1774. Puri A, Kumar A and Bhatnagar V. Hormonal analysis in post-pubertal patients with posterior urethral valves. *European Journal of Pediatric Surgery.* 2002 Oct;12 (5):308-311. X-2, X-3.
1775. Puri B and Sreevastava DK. Exomphalos defects: A review of 15 cases. *Medical Journal Armed Forces India.* 2008 Apr;64 (2):115-118. X-2, X-3.
1776. Puri P, Barton D and O'Donnell B. Prepubertal testicular torsion: subsequent fertility. *J Pediatr Surg.* 1985 Dec;20(6):598-601. X-2, X-3.
1777. Puri P, Guiney EJ and O'Donnell B. Inguinal hernia in infants: the fate of the testis following incarceration. *J Pediatr Surg.* 1984 Feb;19(1):44-6. X-2, X-3.
1778. Puri P and O'Donnell B. Semen analysis of patients who had orchidopexy at or after seven years of age. *Lancet.* 1988 Nov 5;2(8619):1051-2. X-4, X-5, X-6.
1779. Puri P and O'Donnell B. Semen analysis in patients operated on for impalpable testes. *Br J Urol.* 1990 Dec;66(6):646-7. X-4, X-5, X-6.
1780. Puri P and Sparnon A. Relationship of primary site of testis to final testicular size in cryptorchid patients. *Br J Urol.* 1990 Aug;66(2):208-10. X-4, X-5, X-6.
1781. Purohit TM, Purohit MB and Dabhi BJ. Study of semen analysis and testicular biopsy in infertile male. *Indian J Pathol Microbiol.* 2004 Oct;47(4):486-90. X-2, X-3.
1782. Purvis K and Christiansen E. The role of pelvic organ inflammation in the etiology of sperm pathology. *International Journal of Fertility.* 1993;38 (6):372-379. X-2, X-3.
1783. Pyorala S, Huttunen NP and Uhari M. A review and meta-analysis of hormonal treatment of cryptorchidism. *Journal of Clinical Endocrinology and Metabolism.* 1995;80 (9):2795-2799. X-3, X-4, X-5, X-6.
1784. Qian HJ, Du XJ, Zhang C, et al. Cold ischemia time influences spermatogenesis in a testicular ischemia/reperfusion injury model. *Transplant Proc.* 2010 Jun;42(5):1610-3. X-2, X-3.
1785. Quinton R, Duke VM, Robertson A, et al. Idiopathic gonadotrophin deficiency: genetic questions addressed through phenotypic characterization. *Clin Endocrinol (Oxf).* 2001 Aug;55(2):163-74. X-2, X-3.
1786. Qvist H, Fossa SD, Ous S, et al. Retroperitoneal surgery in patients with nonseminomatous testicular cancer and minimal residual tumor. *J Surg Oncol.* 1992 Aug;50(4):220-3. X-2, X-3.
1787. Rabah DM, Adwan AA and Seida MA. Lymphatic preservation using methylene blue dye during laparoscopic varicocelectomy: early results. *Can J Urol.* 2009 Oct;16(5):4826-30. X-2, X-3.
1788. Rabbani F, Goldenberg SL, Gleave ME, et al. Retroperitoneal lymphadenectomy for post-chemotherapy residual masses: is a modified dissection and resection of residual masses sufficient? *Br J Urol.* 1998 Feb;81(2):295-300. X-2, X-3.

1789. Rabbani F, Sheinfeld J, Farivar-Mohseni H, et al. Low-volume nodal metastases detected at retroperitoneal lymphadenectomy for testicular cancer: pattern and prognostic factors for relapse. *J Clin Oncol*. 2001 Apr 1;19(7):2020-5. X-2, X-3.
1790. Raboch J. Spermological findings in various disturbances of somatosexual development. *Andrologia*. 1982 Jul-Aug;14(4):347-51. X-2, X-3.
1791. Radicioni AF, De Marco E, Gianfrilli D, et al. Strategies and advantages of early diagnosis in Klinefelter's syndrome. *Molecular Human Reproduction*. 2010 June;16 (6) (pp 434-440)(gaq027). X-1, X-2, X-3.
1792. Radpour R, Gourabi H, Gilani MA, et al. Correlation between CFTR gene mutations in Iranian men with congenital absence of the vas deferens and anatomical genital phenotype. *J Androl*. 2008 Jan-Feb;29(1):35-40. X-2, X-3.
1793. Rafferty JA, Fan CY, Potter PM, et al. Tissue-specific expression and induction of human O⁶-alkylguanine-DNA alkyltransferase in transgenic mice. *Molecular Carcinogenesis*. 1992;6 (1):26-31. X-2, X-3.
1794. Ragan DC, Casale AJ, Rink RC, et al. Genitourinary anomalies in the CHARGE association. *J Urol*. 1999 Feb;161(2):622-5. X-3.
1795. Raghavan D, Zalberg JR, Grygiel JJ, et al. Multiple atypical nevi: A cutaneous marker of germ cell tumors. *Journal of Clinical Oncology*. 1994 Nov;12 (11):2284-2287. X-2, X-3.
1796. Raina V, Shukla NK, Gupta NP, et al. Germ cell tumours in uncorrected cryptorchid testis at Institute Rotary Cancer Hospital, New Delhi. *British Journal of Cancer*. 1995;71 (2):380-382. X-2, X-3.
1797. Raina V, Shukla NK, Rath GK, et al. Clinical profile and problems of management of 108 cases of germ cell tumours of testis at Institute Rotary Cancer Hospital, All India Institute of Medical Sciences New Delhi 1985-1990. *Br J Cancer*. 1993 Mar;67(3):573-7. X-2, X-3.
1798. Raivio T. *International Journal of Andrology*. [Conference Abstract]. 2010 October;Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference Publication: (var.pagings). 33:38. X-3.
1799. Raivio T, Toppari J, Kaleva M, et al. Serum androgen bioactivity in cryptorchid and noncryptorchid boys during the postnatal reproductive hormone surge. *J Clin Endocrinol Metab*. 2003 Jun;88(6):2597-9. X-3.
1800. Rajfer J. Surgical and hormonal therapy for cryptorchidism: an overview. *Horm Res*. 1988;30(4-5):139-43. X-1, X-2, X-3.
1801. Rajfer J, Sikka SC, Rivera F, et al. Mechanism of inhibition of human testicular steroidogenesis by oral ketoconazole. *J Clin Endocrinol Metab*. 1986 Nov;63(5):1193-8. X-2, X-3.
1802. Rajfer J, Swerdloff RS and Heber DM. Testicular histology following chronic gonadotropin-releasing hormone agonist treatment. *Fertil Steril*. 1984 Nov;42(5):765-71. X-2, X-3.
1803. Rajimwale A, Brant WO and Koyle MA. High scrotal (Bianchi) single-incision orchidopexy: a "tailored" approach to the palpable undescended testis. *Pediatr Surg Int*. 2004 Aug;20(8):618-22. X-4, X-5, X-6.
1804. Rajwanshi A, Indudhara R, Goswami AK, et al. Fine-needle aspiration cytology in azoospermic males. *Diagn Cytopathol*. 1991;7(1):3-6. X-2, X-3.
1805. Ramadan SU, Gokharman D, Tuncbilek I, et al. Does the presence of a mesh have an effect on the testicular blood flow after surgical repair of indirect inguinal hernia? *J Clin Ultrasound*. 2009 Feb;37(2):78-81. X-2, X-3.
1806. Raman JD and Goldstein M. The presence of vasal vessels in men with congenital bilateral absence of the vas deferens. *J Urol*. 2004 Nov;172(5 Pt 1):1941-3. X-2, X-3.
1807. Raman JD, Nobert CF and Goldstein M. Increased incidence of testicular cancer in men presenting with infertility and abnormal semen analysis. *J Urol*. 2005 Nov;174(5):1819-22; discussion 1822. X-2, X-3.
1808. Raman JD and Schlegel PN. Testicular sperm extraction with intracytoplasmic sperm injection is successful for the treatment of nonobstructive azoospermia associated with cryptorchidism. *J Urol*. 2003 Oct;170(4 Pt 1):1287-90. X-2, X-3.
1809. Ramlau-Hansen CH, Olesen AV, Parner ET, et al. Perinatal markers of estrogen exposure and risk of testicular cancer: Follow-up of 1,333,873 Danish males born between 1950 and 2002. *Cancer Causes and Control*. 2009 November;20 (9):1587-1592. X-2, X-3.
1810. Ramos L, de Boer P, Meuleman EJ, et al. Chromatin condensation and DNA damage of human epididymal spermatozoa in obstructive azoospermia. *Reprod Biomed Online*. 2004 Apr;8(4):392-7. X-2, X-3.
1811. , 1812. Randolph J, Cavett C and Eng G. Surgical correction and rehabilitation for children with "Prune-belly" syndrome. *Ann Surg*. 1981 Jun;193(6):757-62. X-2, X-3.
1813. Ransley PG, Vordermark JS, Caldamone AA, et al. Preliminary ligation of the gonadal vessels prior to orchidopexy for the intra-abdominal testicle. A staged Fowler-Stephens procedure. *World Journal of Urology*. [Journal]. 1984;2 (4):266-268. X-4, X-5, X-6.
1814. Rapley EA, Hockley S, Warren W, et al. Somatic mutations of KIT in familial testicular germ cell tumours. *Br J Cancer*. 2004 Jun 14;90(12):2397-401. X-2, X-3.
1815. Rapola J and Salonen R. Visceral anomalies in the Meckel syndrome. *Teratology*. 1985 Apr;31(2):193-201. X-2, X-3.
1816. Rappe BJ, Zandberg AR, De Vries JD, et al. The value of laparoscopy in the management of the impalpable cryptorchid testis. *Eur Urol*. 1992;21(2):164-7. X-4, X-5, X-6.

1817. Rasmussen TB, Ingerslev HJ and Hostrup H. Natural history of the maldescended testis. *Horm Res.* 1988;30(4-5):164-6. X-3.
1818. Rasoulpour RJ, Schoenfeld HA, Gray DA, et al. Expression of a K48R mutant ubiquitin protects mouse testis from cryptorchid injury and aging. *Am J Pathol.* 2003 Dec;163(6):2595-603. X-2, X-3.
1819. Rauen KA, Schoyer L, McCormick F, et al. Proceedings from the 2009 genetic syndromes of the Ras/MAPK pathway: From bedside to bench and back. *American Journal of Medical Genetics, Part A.* 2010 January;152(1):4-24. X-1, X-2, X-3.
1820. Ravichandran R, Lafferty F, McGinniss MJ, et al. Congenital adrenal hyperplasia presenting as massive adrenal incidentalomas in the sixth decade of life: report of two patients with 21-hydroxylase deficiency. *J Clin Endocrinol Metab.* 1996 May;81(5):1776-9. X-2, X-3.
1821. Ray B, Jewett MAS and Donohue RE. Summary of distribution of retroperitoneal lymph node metastases in testicular germinal tumors (by Biswamay Ray, Steven I. Hajdu, and Willet F. Whitmore, Jr). *Seminars in Urologic Oncology.* 1997;15 (2):130-135. X-2, X-3.
1822. Raynaud JP. Antiandrogens in combination with LH-RH agonists in prostate cancer. *American Journal of Clinical Oncology: Cancer Clinical Trials.* [Journal]. 1988;11 (SUPPL. 2):S132-S147. X-2, X-3.
1823. Re M, Iannitelli M, Cerasaro A, et al. Histochemical study of glycogen and phosphorylase activity on bilateral biopsies of oligospermic men with varicocele. *Arch Androl.* 1983 Mar;10(1):79-83. X-2, X-3.
1824. Read G. Lymphomas of the testis-results of treatment 1960-77. *Clin Radiol.* 1981 Nov;32(6):687-92. X-2, X-3.
1825. Recker F, Goepel M, Otto T, et al. An intra-operative seminal and prostate emission test as a control for nerve-sparing procedures in primary and secondary retroperitoneal lymphadenectomy. *Br J Urol.* 1996 Jan;77(1):133-7. X-2, X-3.
1826. Reddy EK, Burke M, Giri S, et al. Testicular neoplasms: seminoma. *J Natl Med Assoc.* 1990 Sep;82(9):651-5. X-2, X-3.
1827. Reddy GS, Das LK and Pani SP. The preferential site of adult *Wuchereria bancrofti*: an ultrasound study of male asymptomatic microfilaria carriers in Pondicherry, India. *Natl Med J India.* 2004 Jul-Aug;17(4):195-6. X-2, X-3.
1828. Redman JF. Simplified technique for scrotal pouch orchiopexy. *Urol Clin North Am.* 1990 Feb;17(1):9-12. X-4, X-5, X-6.
1829. Redman JF. Applied anatomy of the cremasteric muscle and fascia. *J Urol.* 1996 Oct;156(4):1337-40. X-2, X-3.
1830. Redman JF. The secondary internal ring: applications to surgery of the inguinal canal. *J Urol.* 1996 Jan;155(1):170-3. X-4, X-5, X-6.
1831. Redman JF. Inguinal reoperation for undescended testis and hernia: approach to the spermatic cord through the cremaster fascia. *J Urol.* 2000 Nov;164(5):1705-7. X-4, X-5, X-6.
1832. Redman JF. Technique for repair of minimal distal balanitic hypospadias. *Urology.* 2006 Nov;68(5):1087-90. X-3.
1833. Redman JF and Barthold JS. A technique for atraumatic scrotal pouch orchiopexy in the management of testicular torsion. *J Urol.* 1995 Oct;154(4):1511-2. X-2, X-3.
1834. Redman JF and Reddy PP. Common urologic problems in children: guides to evaluation and referral, Part I. *J Ark Med Soc.* 2001 Jun;97(12):420-1. X-1, X-2, X-3.
1835. Redman JF and Reddy PP. Common urologic problems in children: guides to evaluation and referral, Part II. *J Ark Med Soc.* 2001 Jul;98(1):22-4. X-1, X-2, X-3.
1836. Redmond IJ, Samaha Jr MA, Charles RS, et al. Bilateral synchronous testicular germ cell cancer. *Southern Medical Journal.* 1995;88 (3):305-308. X-2, X-3.
1837. Regadera J, Cobo P, Martinez-Garcia F, et al. Testosterone immunoexpression in human Leydig cells of the tunica albuginea testis and spermatic cord. A quantitative study in normal fetuses, young adults, elderly men and patients with cryptorchidism. *Andrologia.* 1993 May-Jun;25(3):115-22. X-2, X-3.
1838. Regadera J, Codesal J, Paniagua R, et al. Immunohistochemical and quantitative study of interstitial and intratubular Leydig cells in normal men, cryptorchidism, and Klinefelter's syndrome. *J Pathol.* 1991 Aug;164(4):299-306. X-2, X-3.
1839. Regadera J, Martinez-Garcia F, Gonzalez-Peramato P, et al. Androgen receptor expression in sertoli cells as a function of seminiferous tubule maturation in the human cryptorchid testis. *J Clin Endocrinol Metab.* 2001 Jan;86(1):413-21. X-2, X-3.
1840. Reinges MHT, Kaiser WA, Miersch WD, et al. Dynamic magnetic resonance imaging of the contralateral testis in patients with malignant tumor of the testis. *Urology.* 1994;44 (4):540-547. X-2, X-3.
1841. Reinprayoon D and Bunyavejchevin S. Premarital counseling clinic at Chulalongkorn Hospital. *J Med Assoc Thai.* 1998 Dec;81(12):993-7. X-2, X-3.
1842. Reis LM, Tyler RC, Abdul-Rahman O, et al. Mutation analysis of B3GALTL in Peters Plus syndrome. *American Journal of Medical Genetics, Part A.* 2008 15 Oct;146 (20):2603-2610. X-2, X-3.
1843. Reis-Filho JS, Ricardo S, Gartner F, et al. Bilateral gonadoblastomas in a dog with mixed gonadal dysgenesis. *J Comp Pathol.* 2004 Feb-Apr;130(2-3):229-33. X-2, X-3.

1844. Renshaw AA. Testicular calcifications: incidence, histology and proposed pathological criteria for testicular microlithiasis. *J Urol.* 1998 Nov;160(5):1625-8. X-2, X-3.
1845. Renzulli JF, 2nd, Shetty R, Mangray S, et al. Clinical and histological significance of the testicular remnant found on inguinal exploration after diagnostic laparoscopy in the absence of a patent processus vaginalis. *J Urol.* 2005 Oct;174(4 Pt 2):1584-6; discussion 1586. X-4, X-5, X-6.
1846. Rescorla FJ and Grosfeld JL. Inguinal hernia repair in the perinatal period and early infancy: clinical considerations. *J Pediatr Surg.* 1984 Dec;19(6):832-7. X-3.
1847. Resorlu B, Abdulmajed MI, Kara C, et al. Is intracytoplasmic sperm injection essential for the treatment of hypogonadotrophic hypogonadism? A comparison between idiopathic and secondary hypogonadotrophic hypogonadism. *Hum Fertil (Camb).* 2009 Dec;12(4):204-8. X-2.
1848. Resorlu B, Kara C, Sahin E, et al. The significance of age on success of surgery for patients with varicocele. *Int Urol Nephrol.* 2010 Jun;42(2):351-6. X-2, X-3.
1849. Rey RA, Codner E, Iniguez G, et al. Low risk of impaired testicular Sertoli and Leydig cell functions in boys with isolated hypospadias. *J Clin Endocrinol Metab.* 2005 Nov;90(11):6035-40. X-3.
1850. Reynaud R, Albarel F, Saveanu A, et al. Pituitary stalk interruption syndrome in 83 patients: Novel HESX1 mutation and severe hormonal prognosis in malformative forms. *European Journal of Endocrinology.* 2011 01 Apr;164 (4):457-465. X-2, X-3.
1851. Reznik Y, Rieu M, Kuhn JM, et al. Luteinizing hormone regulation by sex steroids in men with germinal and Leydig cell tumours. *Clin Endocrinol (Oxf).* 1993 May;38(5):487-93. X-2, X-3.
1852. Ribe N, Manasia P, Sarquella J, et al. Clinical follow-up after subinguinal varicocele ligation to treat pain. *Arch Ital Urol Androl.* 2002 Jun;74(2):51-3. X-2, X-3.
1853. Riccabona M, Oswald J, Koen M, et al. Optimizing the operative treatment of boys with varicocele: sequential comparison of 4 techniques. *J Urol.* 2003 Feb;169(2):666-8. X-2, X-3, X-9.
1854. Richiardi L, Vizzini L, Nordenskjold A, et al. Rates of orchiopexies in Sweden: 1977-1991. *Int J Androl.* 2009 Oct;32(5):473-8. X-4, X-5, X-6.
1855. Richie JP. Clinical stage 1 testicular cancer: the role of modified retroperitoneal lymphadenectomy. *J Urol.* 1990 Nov;144(5):1160-3. X-2, X-3.
1856. Richthoff J, Rylander L, Hagmar L, et al. Higher sperm counts in Southern Sweden compared with Denmark. *Hum Reprod.* 2002 Sep;17(9):2468-73. X-2, X-3.
1857. Riebel T, Gonnermann D and Willig RP. Spermatic venography in undescended testes. *Pediatr Radiol.* 1987;17(1):39-44. X-3, X-9.
1858. Rifkin MD. Scrotal ultrasound. *Urol Radiol.* 1987;9(2):119-26. X-1, X-2, X-3.
1859. Rigatti P, Bua L, Lesma A, et al. Pediatric andrology. *Acta Urologica Italica.* 1997;11 (5):389-395. X-2, X-3.
1860. Ring KS, Burbige KA, Benson MC, et al. The flow cytometric analysis of undescended testes in children. *J Urol.* 1990 Aug;144(2 Pt 2):494-8; discussion 512-3. X-3, X-4, X-5, X-6.
1861. Rio M, Malan V, Boissel S, et al. Familial interstitial Xq27.3q28 duplication encompassing the FMR1 gene but not the MECP2 gene causes a new syndromic mental retardation condition. *European Journal of Human Genetics.* 2010 March;18 (3):285-290. X-2, X-3.
1862. Riquelme M, Aranda A and Riquelme QM. Laparoscopic pediatric inguinal hernia repair: no ligation, just resection. *J Laparoendosc Adv Surg Tech A.* 2010 Feb;20(1):77-80. X-3.
1863. Riquelme M, Aranda A, Rodriguez C, et al. Incidence and management of the inguinal hernia during laparoscopic orchiopexy in palpable cryptorchidism: preliminary report. *Pediatr Surg Int.* 2007 Apr;23(4):301-4. X-4, X-5, X-6.
1864. Riquelme M, Aranda A, Rodriguez C, et al. Laparoscopic orchiopexy for palpable undescended testes: a five-year experience. *J Laparoendosc Adv Surg Tech A.* 2006 Jun;16(3):321-4. X-4, X-5, X-6.
1865. Riquet M, Berna P, Brian E, et al. Intrathoracic lymph node metastases from extrathoracic carcinoma: the place for surgery. *Ann Thorac Surg.* 2009 Jul;88(1):200-5. X-2, X-3.
1866. Robboy SJ and Jaubert F. Neoplasms and pathology of sexual developmental disorders (intersex). *Pathology.* 2007 Feb;39 (1):147-163. X-1, X-2, X-3.
1867. Robboy SJ, Miller T, Donahoe PK, et al. Dysgenesis of testicular and streak gonads in the syndrome of mixed gonadal dysgenesis: perspective derived from a clinicopathologic analysis of twenty-one cases. *Hum Pathol.* 1982 Aug;13(8):700-16. X-2, X-3.
1868. Robinson TE. Behavioral sensitization: characterization of enduring changes in rotational behavior produced by intermittent injections of amphetamine in male and female rats. *Psychopharmacology (Berl).* 1984;84(4):466-75. X-2, X-3.
1869. Rock JA, Wentz AC and Cole KA. Fetal malformations following progesterone therapy during pregnancy: A preliminary report. *Fertility and Sterility.* 1985;44 (1):17-19. X-2, X-3.
1870. Rodriguez Pena M, Alescio L, Russell A, et al. Predictors of improved seminal parameters and fertility after varicocele repair in young adults. *Andrologia.* 2009 Oct;41(5):277-81. X-2, X-3.
1871. Roemer HC, Von Kathen M, Schops W, et al. Palpation of the testes in draftees: acceptance on the occasion of muster and implication for health promotion. *Int J Occup Med Environ Health.* 2006;19(4):254-9. X-2, X-3.

1872. Rogatsch H, Jezek D, Hittmair A, et al. Expression of vimentin, cytokeratin, and desmin in Sertoli cells of human fetal, cryptorchid, and tumour-adjacent testicular tissue. *Virchows Arch.* 1996 Feb;427(5):497-502. X-2, X-3.
1873. Rogers E, Teahan S, Gallagher H, et al. The role of orchiectomy in the management of postpubertal cryptorchidism. *J Urol.* 1998 Mar;159(3):851-4. X-2.
1874. Rohatgi M, Gupta DK, Menon PS, et al. Mixed gonadal dysgenesis and dysgenetic male pseudohermaphroditism--a critical analysis. *Indian J Pediatr.* 1992 Jul-Aug;59(4):487-500. X-3.
1875. Rohatgi M, Menon PS, Verma IC, et al. The presence of intersexuality in patients with advanced hypospadias and undescended gonads. *J Urol.* 1987 Feb;137(2):263-7. X-3.
1876. Rolle L, Tamagnone A, Destefanis P, et al. Microsurgical "testis-sparing" surgery for nonpalpable hypoechoic testicular lesions. *Urology.* 2006 Aug;68(2):381-5. X-2, X-3.
1877. Romeo R, Castorina S and Marcello MF. Intermediate filaments of human Sertoli cells in germinal alterations. *Ital J Anat Embryol.* 1995 Apr-Jun;100(2):75-81. X-2, X-3.
1878. Romeo R and Marcello MF. Some considerations on the human Leydig cell (immunohistochemical observations). *Arch Ital Urol Androl.* 1999 Jun;71(3):143-8. X-2, X-3.
1879. Rong R, Zhang CY and Wang XY. Normal appearance of large field diffusion weighted imaging on 3.0T MRI. *Chin Med Sci J.* 2008 Sep;23(3):158-61. X-2, X-3.
1880. Rose M, Aberg M and Bohn J. Testicular prosthetic implants in boys and teenagers with primary or secondary anorchism. *Scand J Plast Reconstr Surg Hand Surg.* 2008;42(2):101-4. X-2, X-3.
1881. Rosenfield AT, Blair DN, McCarthy S, et al. The pars infravaginalis gubernaculi: Importance in the identification of the undescended testis. *American Journal of Roentgenology.* [Journal]. 1989;153 (4):775-778. X-2, X-3.
1882. Rosenfield AT, Blair DN, McCarthy S, et al. Society of Uroradiology Award paper. The pars infravaginalis gubernaculi: importance in the identification of the undescended testis. *AJR Am J Roentgenol.* 1989 Oct;153(4):775-8. X-1, X-3.
1883. Rosenfield AT and Hammers LW. Imaging of the testicle: the painful scrotum and nonpalpable masses. *Urol Radiol.* 1992;14(3):229-33. X-1, X-2, X-3.
1884. Rosito NC, Koff WJ, da Silva Oliveira TL, et al. Volumetric and histological findings in intra-abdominal testes before and after division of spermatic vessels. *J Urol.* 2004 Jun;171(6 Pt 1):2430-3. X-4, X-5, X-6.
1885. Ross LS and Ruppman N. Varicocele vein ligation in 565 patients under local anesthesia: a long-term review of technique, results and complications in light of proposed management by laparoscopy. *J Urol.* 1993 May;149(5 Pt 2):1361-3. X-2, X-3.
1886. Rossmann ED, Liljegren A and Bergh J. Male breast cancer - How to treat? *Breast Cancer Online.* 2007 Aug;10 (8)(e15). X-1, X-2, X-3.
1887. Roth MY, Lin K, Amory JK, et al. Serum LH correlates highly with intratesticular steroid levels in normal men. *Journal of Andrology.* 2010 March-April;31 (2):138-145. X-2, X-3.
1888. Rottembourg D, Linglart A, Adamsbaum C, et al. Gonadotrophic status in adolescents with pituitary stalk interruption syndrome. *Clin Endocrinol (Oxf).* 2008 Jul;69(1):105-11. X-3.
1889. Routh JC, Huang L, Retik AB, et al. Contemporary epidemiology and characterization of newborn males with prune belly syndrome. *Urology.* 2010 Jul;76(1):44-8. X-3.
1890. Rozanski TA, Wojno KJ and Bloom DA. The remnant orchiectomy. *J Urol.* 1996 Feb;155(2):712-3; discussion 714. X-3, X-4, X-5, X-6.
1891. Rune GM, Mayr J, Neugebauer H, et al. Pattern of Sertoli cell degeneration in cryptorchid prepubertal testes. *Int J Androl.* 1992 Feb;15(1):19-31. X-3, X-4, X-5, X-6.
1892. Rusnack SL, Wu HY, Huff DS, et al. Testis histopathology in boys with cryptorchidism correlates with future fertility potential. *J Urol.* 2003 Feb;169(2):659-62. X-4, X-5, X-6.
1893. Russinko PJ, Siddiq FM, Tackett LD, et al. Prescrotal orchiopexy: an alternative surgical approach for the palpable undescended testis. *J Urol.* 2003 Dec;170(6 Pt 1):2436-8. X-4, X-5, X-6.
1894. Sabanegh E, Jr. and Thomas AJ, Jr. Effectiveness of crossover transseptal vasoepididymostomy in treating complex obstructive azoospermia. *Fertil Steril.* 1995 Feb;63(2):392-5. X-2, X-3.
1895. Sabroe S and Olsen J. Perinatal correlates of specific histological types of testicular cancer in patients below 35 years of age: a case-cohort study based on midwives' records in Denmark. *Int J Cancer.* 1998 Oct 5;78(2):140-3. X-2, X-3.
1896. Sack J, Reichman B and Fix A. Normative values for testicular descent from infancy to adulthood. *Horm Res.* 1993;39(3-4):118-21. X-3.
1897. Sadri-Ardekani H, Mizrak SC, Koruji M, et al. Molecular Human Reproduction. [Conference Abstract]. 2009 June;Conference: 25th Annual Meeting of the European Society of Human Reproduction and Embryology, ESHRE Amsterdam Netherlands. Conference Start: 20090628 Conference End: 20090701. Conference: 25th Annual Meeting of the European Society of Human Reproduction and Embryology, ESHRE Amsterdam Netherlands. Conference Start: 20090628 Conference End: 20090701. Conference Publication: (var.pagings). 24:i94-i95. X-2, X-3.

1898. Saeed A, Khan AR, Lee V, et al. Pain management for unilateral orchidopexy in children: an effective regimen. *World J Surg.* 2009 Mar;33(3):603-6. X-4, X-5, X-6.
1899. Safarinejad MR. Infertility among couples in a population-based study in Iran: prevalence and associated risk factors. *Int J Androl.* 2008 Jun;31(3):303-14. X-2, X-3.
1900. Sagnak L, Ersoy H, Ozok U, et al. The significance of Y chromosome microdeletion analysis in subfertile men with clinical varicocele. *Archives of Medical Science.* 2010 June;6 (3):382-387. X-2, X-3.
1901. Sagstuen H, Aass N, Fossa SD, et al. Blood pressure and body mass index in long-term survivors of testicular cancer. *J Clin Oncol.* 2005 Aug 1;23(22):4980-90. X-2, X-3.
1902. Sahin C, Artan M and Aksoy Y. The effects of one- and two-stage orchiopexy on postoperative serum testosterone levels and testicular volume in adult patients with bilateral nonpalpable testes. *J Laparoendosc Adv Surg Tech A.* 2002 Oct;12(5):327-31. X-2.
1903. Sahin C, Yakut G and Haholu A. Laparoscopic orchiectomy and simultaneous inguinal herniorrhaphy technique by the transperitoneal route in adult patients. *J Laparoendosc Adv Surg Tech A.* 2003 Oct;13(5):301-4. X-2.
1904. Sahin C, Yigit T and Ozbey I. Adult nonpalpable testis: is laparoscopy always required? *J Laparoendosc Adv Surg Tech A.* 2002 Dec;12(6):431-4. X-2.
1905. Sahoo T, Naeem R, Pham K, et al. A patient with isochromosome 18q, radial-thumb aplasia, thrombocytopenia, and an unbalanced 10;18 chromosome translocation. *American Journal of Medical Genetics.* 2005 15 Feb;133 A (1):93-98. X-2, X-3.
1906. Sailors DM, Layman TS, Burns RP, et al. Laparoscopic hernia repair: a preliminary report. *Am Surg.* 1993 Feb;59(2):85-9. X-2, X-3.
1907. Saito K, Suzuki K, Noguchi K, et al. Semen cryopreservation for patients with malignant or non-malignant disease: our experience for 10 years. *Nippon Hinyokika Gakkai Zasshi.* 2003 May;94(4):513-20. X-2, X-3.
1908. Saito S and Kumamoto Y. The number of spermatogonia in various congenital testicular disorders. *J Urol.* 1989 May;141(5):1166-8. X-3.
1909. Saito S, Kumamoto Y, Ito N, et al. Human chorionic gonadotropin beta-subunit in human semen. *Arch Androl.* 1988;20(1):87-99. X-2, X-3.
1910. Saiyed H, Dewan A, Bhatnagar V, et al. Effect of endosulfan on male reproductive development. *Environmental Health Perspectives.* 2003 Dec;111 (16):1958-1962. X-2, X-3.
1911. Sakamoto H, Ogawa Y and Yoshida H. Relationship between testicular volume and varicocele in patients with infertility. *Urology.* 2008 Jan;71(1):104-9. X-2, X-3.
1912. Sakamoto H, Saito K, Oohta M, et al. Testicular volume measurement: comparison of ultrasonography, orchidometry, and water displacement. *Urology.* 2007 Jan;69(1):152-7. X-2, X-3.
1913. Sakamoto H, Saito K, Shichizyo T, et al. Color Doppler ultrasonography as a routine clinical examination in male infertility. *Int J Urol.* 2006 Aug;13(8):1073-8. X-2, X-3.
1914. Sakamoto H, Shichizyou T, Saito K, et al. Testicular microlithiasis identified ultrasonographically in Japanese adult patients: prevalence and associated conditions. *Urology.* 2006 Sep;68(3):636-41. X-2, X-3.
1915. Sakellaris G, Georgogianaki P, Astyrakaki E, et al. Prevention of post-operative nausea and vomiting in children - A prospective randomized double-blind study. *Acta Paediatrica, International Journal of Paediatrics.* 2008 Jun;97 (6):801-804. X-3.
1916. Sakellaris GS and Charissis GC. Acute epididymitis in Greek children: A 3-year retrospective study. *European Journal of Pediatrics.* 2008 Jul;167 (7):765-769. X-3.
1917. Salanova M, Gandini L, Lenzi A, et al. Is hyperdiploidy of immature ejaculated germ cells predictive of testis malignancy? A comparative study in healthy normozoospermic, infertile, and testis tumor suffering subjects. *Lab Invest.* 1999 Sep;79(9):1127-35. X-2, X-3.
1918. Salenave S, Chanson P, Bry H, et al. Kallmann's syndrome: a comparison of the reproductive phenotypes in men carrying KAL1 and FGFR1/KAL2 mutations. *J Clin Endocrinol Metab.* 2008 Mar;93(3):758-63. X-2, X-3.
1919. Salisz JA, Kass EJ and Steinert BW. The significance of elevated scrotal temperature in an adolescent with a varicocele. *Adv Exp Med Biol.* 1991;286:245-51. X-2, X-3.
1920. Sallami S, Dahmani A, Ben Rhouma S, et al. *Urology.* [Conference Abstract]. 2009 October;Conference: 30th Congress of the Societe Internationale d'Urologie, SIU 2009 Shanghai China. Conference Start: 20091101 Conference End: 20091105 Sponsor: SIU. Conference: 30th Congress of the Societe Internationale d'Urologie, SIU 2009 Shanghai China. Conference Start: 20091101 Conference End: 20091105 Sponsor: SIU. Conference Publication: (var.pagings). 74 (4 SUPPL S):S43-S44. X-2, X-3.
1921. Salman AB, Mutlu S, Iskit AB, et al. Hemodynamic monitoring of the contralateral testis during unilateral testicular torsion describes the mechanism of damage. *Eur Urol.* 1998;33(6):576-80. X-2, X-3.
1922. Salzhauer EW, Sokol A and Glassberg KI. Paternity after adolescent varicocele repair. *Pediatrics.* 2004 Dec;114(6):1631-3. X-2, X-3.
1923. Samnakay N, Cohen RJ, Orford J, et al. Androgen and oestrogen receptor status of the human appendix testis. *Pediatr Surg Int.* 2003 Sep;19(7):520-4. X-2, X-3.
1924. Sampaio FJ, Favorito LA, Freitas MA, et al. Arterial supply of the human fetal testis during its migration. *J Urol.* 1999 May;161(5):1603-5. X-2, X-3.

1925. Samuel DG and Izzidien AY. Bianchi high scrotal approach revisited. *Pediatr Surg Int.* 2008 Jun;24(6):741-4. X-4, X-5, X-6.
1926. Santamaria L, Martinez-Onsurbe P, Paniagua R, et al. Laminin, type IV collagen, and fibronectin in normal and cryptorchid human testes. An immunohistochemical study. *Int J Androl.* 1990 Apr;13(2):135-46. X-3.
1927. Santoro S, Boninsegni R, Bassi F, et al. Testosterone concentrations in spermatic venous blood plasma of prepubertal boys. *Int J Androl.* 1981 Feb;4(1):82-5. X-3, X-4, X-5, X-6.
1928. Saranga Bharathi R, Arora M and Baskaran V. Pediatric inguinal hernia: laparoscopic versus open surgery. *JLS.* 2008 Jul-Sep;12(3):277-81. X-2, X-3.
1929. Sarfati J, Guiochon-Mantel A, Rondard P, et al. A comparative phenotypic study of kallmann syndrome patients carrying monoallelic and biallelic mutations in the prokineticin 2 or prokineticin receptor 2 genes. *J Clin Endocrinol Metab.* 2010 Feb;95(2):659-69. X-2, X-3.
1930. Sarrate Z, Blanco J, Egozcue S, et al. Identification of meiotic anomalies with multiplex fluorescence in situ hybridization: Preliminary results. *Fertil Steril.* 2004 Sep;82(3):712-7. X-2, X-3.
1931. Sasagawa I, Ichiyanagi O, Yazawa H, et al. Round spermatid transfer and embryo development. *Archives of Andrology.* 1998;41 (3):151-157. X-2, X-3.
1932. Sasagawa I, Nakada T, Hashimoto T, et al. Hormone profiles and contralateral testicular histology in Down's syndrome with unilateral testicular tumor. *Arch Androl.* 1993 Mar-Apr;30(2):93-8. X-2, X-3.
1933. Sasagawa I, Nakada T and Yanagimachi R. Application of ICSI for cryptorchid therapy. *Archives of Andrology.* 2000;45 (2):77-83. X-3.
1934. Sathyanarayana S, Beard L, Zhou C, et al. Measurement and correlates of ano-genital distance in healthy, newborn infants. *Int J Androl.* 2010 Apr;33(2):317-23. X-2, X-3.
1935. Sato K, Kihara K, Ando M, et al. Seminal emission by electrical stimulation of the spermatic nerve and epididymis. *Int J Androl.* 1991 Dec;14(6):461-7. X-2, X-3.
1936. Saxena AK, Hulskamp G, Schleef J, et al. Gastroschisis: a 15-year, single-center experience. *Pediatr Surg Int.* 2002 Sep;18(5-6):420-4. X-3.
1937. Schaison G, Renoir M, Lagoguey M, et al. On the role of dihydrotestosterone in regulating luteinizing hormone secretion in man. *J Clin Endocrinol Metab.* 1980 Nov;51(5):1133-7. X-2, X-3.
1938. Schaison G, Young J, Pholsena M, et al. Failure of combined follicle-stimulating hormone-testosterone administration to initiate and/or maintain spermatogenesis in men with hypogonadotropic hypogonadism. *J Clin Endocrinol Metab.* 1993 Dec;77(6):1545-9. X-2, X-3.
1939. Scheiber K, Ackermann D and Studer UE. Bilateral testicular germ cell tumors: a report of 20 cases. *J Urol.* 1987 Jul;138(1):73-6. X-2, X-3.
1940. Scheiber K, Marberger H and Bartsch G. Exocrine and endocrine testicular function in patients with unilateral testicular disease. *J R Soc Med.* 1983 Aug;76(8):649-51. X-3, X-4, X-5, X-6.
1941. Scheiber K, Menardi G, Margerger H, et al. Late results after surgical treatment of maldescended testes with special regard to exocrine and endocrine testicular function. *Eur Urol.* 1981;7(5):268-73. X-4, X-5, X-6.
1942. Scheiber K, Mikuz G and Bartsch G. Exocrine and endocrine functions in unilateral testicular disease. *World Journal of Urology. [Journal].* 1984;2 (4):251-254. X-2, X-3.
1943. Scheiden R, Hein T, Wagener C, et al. Testicular cancer in Luxembourg: incidence and outcome in relation to the different histo-pathological types (1980-2004). *Bull Soc Sci Med Grand Duche Luxemb.* 2008(4):521-39. X-2, X-3.
1944. Scherr D and Goldstein M. Comparison of bilateral versus unilateral varicocelectomy in men with palpable bilateral varicoceles. *J Urol.* 1999 Jul;162(1):85-8. X-2, X-3.
1945. Schier F, Montupet P and Esposito C. Laparoscopic inguinal herniorrhaphy in children: a three-center experience with 933 repairs. *J Pediatr Surg.* 2002 Mar;37(3):395-7. X-2, X-3.
1946. Schier F, Turial S, Huckstadt T, et al. Laparoscopic inguinal hernia repair does not impair testicular perfusion. *J Pediatr Surg.* 2008 Jan;43(1):131-5; discussion 135. X-2, X-3.
1947. Schiff J, Kelly C, Goldstein M, et al. Managing varicoceles in children: results with microsurgical varicocelectomy. *BJU Int.* 2005 Feb;95(3):399-402. X-2, X-3.
1948. Schinfeld JS, Schiff I and Newton R. Testicular hormone concentration in men with varicoceles: immediate effects of varicocelectomy. *Int J Fertil.* 1983;28(3):177-80. X-2, X-3.
1949. Schlegel PN and Goldstein M. Microsurgical vasoepididymostomy: refinements and results. *J Urol.* 1993 Oct;150(4):1165-8. X-2, X-3.
1950. Schmidt L and Vydra G. Current problems of the diagnostics of the retroperitoneum. *Acta Chir Hung.* 1986;27(1):35-44. X-2, X-3.
1951. Schnack TH, Poulsen G, Myrup C, et al. Familial coaggregation of cryptorchidism, hypospadias, and testicular Germ cell cancer: A nationwide cohort study. *Journal of the National Cancer Institute.* 2010 February;102 (3):187-192. X-2, X-3.
1952. Schoor RA, Elhanbly SM, Ross LS, et al. The influence of obstructive interval on patency rates following microsurgical epididymovasostomy. *World J Urol.* 2002 Apr;19(6):453-6. X-2, X-3.
1953. School M, Frensdorf EL and Heijens JP. The results of surgical therapy for bilateral maldescended testes. *Z Kinderchir.* 1983 Jun;38(3):169-72. X-2.

1954. Schover LR and von Eschenbach AC. Sexual and marital relationships after treatment for nonseminomatous testicular cancer. *Urology*. 1985 Mar;25(3):251-5. X-2, X-3.
1955. Schrader M, Muller M, Sofikitis N, et al. "Onco-tese": testicular sperm extraction in azoospermic cancer patients before chemotherapy-new guidelines? *Urology*. 2003 Feb;61(2):421-5. X-2, X-3.
1956. Schrepferman CG, Carson MR, Sparks AE, et al. Need for sperm retrieval and cryopreservation at vasectomy reversal. *J Urol*. 2001 Nov;166(5):1787-9. X-2, X-3.
1957. Schulze KA and Pfister RR. Evaluating the undescended testis. *Am Fam Physician*. 1985 Jun;31(6):133-9. X-1, X-3.
1958. Schulze W, Thoms F and Knuth UA. Testicular sperm extraction: comprehensive analysis with simultaneously performed histology in 1418 biopsies from 766 subfertile men. *Hum Reprod*. 1999 Sep;14 Suppl 1:82-96. X-2, X-3.
1959. Schwager KL, Baines DB and Meyer RJ. Acupuncture and postoperative vomiting in day-stay paediatric patients. *Anaesth Intensive Care*. 1996 Dec;24(6):674-7. X-2, X-3.
1960. Schwarzer JU, Fiedler K, Hertwig IV, et al. Male factors determining the outcome of intracytoplasmic sperm injection with epididymal and testicular spermatozoa. *Andrologia*. 2003 Aug;35 (4):220-226. X-2, X-3.
1961. Schwarzer JU, Fiedler K, Hertwig IV, et al. Sperm retrieval procedures and intracytoplasmic spermatozoa injection with epididymal and testicular sperms. *Urologia Internationalis*. 2003;70 (2):119-123. X-2, X-3.
1962. Scolfaro MR, Cardinali IA, Stuchi-Perez EG, et al. Morphometry and histology of gonads from 13 children with dysgenetic male pseudohermaphroditism. *Archives of Pathology and Laboratory Medicine*. 2001;125 (5):652-656. X-3.
1963. Scott JE. Laparoscopy as an aid in diagnosis and management of the impalpable testis. *J Pediatr Surg*. 1982 Feb;17(1):14-6. X-4, X-5, X-6.
1964. Sebold C, Roeder E, Zimmerman M, et al. Tetrasomy 18p: Report of the molecular and clinical findings of 43 individuals. *American Journal of Medical Genetics, Part A*. 2010 September;152 (9):2164-2172. X-2, X-3.
1965. Seddon JM, Savory L and Scott-Conner C. Cryptorchidism: the role of medical education in diagnosis. *South Med J*. 1985 Oct;78(10):1201-4. X-3.
1966. Seibold J, Janetschek G and Bartsch G. Laparoscopic surgery in pediatric urology. *Eur Urol*. 1996;30(3):394-9. X-4, X-5, X-6.
1967. Seifer I, Amat S, Delgado-Viscogliosi P, et al. Screening for microdeletions on the long arm of chromosome Y in 53 infertile men. *Int J Androl*. 1999 Jun;22(3):148-54. X-2, X-3.
1968. Selice R, Di Mambro A, Garolla A, et al. Spermatogenesis in Klinefelter syndrome. *Journal of Endocrinological Investigation*. 2010 December;33 (11):789-793. X-2, X-3.
1969. Seminara SB, Boepple PA, Nachtigall LB, et al. Inhibin B in males with gonadotropin-releasing hormone (GnRH) deficiency: changes in serum concentration after shortterm physiologic GnRH replacement—a clinical research center study. *J Clin Endocrinol Metab*. 1996 Oct;81(10):3692-6. X-2, X-3.
1970. Semmes OJ, Feng Z, Adam BL, et al. Evaluation of serum protein profiling by surface-enhanced laser desorption/ionization time-of-flight mass spectrometry for the detection of prostate cancer: I. Assessment of platform reproducibility. *Clinical Chemistry*. 2005 Jan;51 (1):102-112. X-2, X-3.
1971. Sengupta B. A study on Pre-employment Medical Examination for non-gazetted Railway Services. *Indian Journal of Occupational and Environmental Medicine*. 2003 Jan;7 (1):7-10. X-2, X-3.
1972. Sepulveda W, Dezerega V, Horvath E, et al. Prenatal sonographic diagnosis of Aarskog syndrome. *J Ultrasound Med*. 1999 Oct;18(10):707-10. X-2, X-3.
1973. Serban M, Poenaru D, Pop L, et al. Surgery—a challenge in haemophiliacs with inhibitors. *Hamostaseologie*. 2009 Oct;29 Suppl 1:S39-41. X-2, X-3.
1974. Serefoglu EC and Balbay MD. Slow zoledronic acid releasing testis prostheses in the treatment of prostate cancer patients with bone metastases. *Med Hypotheses*. 2009 Sep;73(3):387-8. X-1, X-2, X-3.
1975. Serio M, Forti G, Facchinetti F, et al. Steroid secretion by the prepubertal human testis. *J Steroid Biochem*. 1983 Jul;19(1C):897-9. X-3, X-4, X-5, X-6.
1976. Serter S, Orguc S, Gumus B, et al. Doppler sonographic findings in testicular microlithiasis. *Int Braz J Urol*. 2008 Jul-Aug;34(4):477-82; discussion 482-4. X-2, X-3.
1977. Sethia KK, Bickerstaff KI and Murie JA. Changing pattern of scrotal exploration for testicular torsion. *Urology*. 1988 May;31(5):408-10. X-2, X-3.
1978. Sexton WJ and Assimos DG. Diagnostic and therapeutic laparoscopy for the adult cryptorchid testicle. *Tech Urol*. 1999 Mar;5(1):24-8. X-2.
1979. Seyed-Ahadi MM, Khaleghnejad-Tabari A, Mirshemirani A, et al. Wilm's tumor: A 10 year retrospective study. *Archives of Iranian Medicine*. 2007 Jan;10 (1):65-69. X-3.
1980. Seymour JF, Solomon B, Wolf MM, et al. Primary large-cell non-Hodgkin's lymphoma of the testis: a retrospective analysis of patterns of failure and prognostic factors. *Clin Lymphoma*. 2001 Sep;2(2):109-15. X-2, X-3.
1981. Shafik A and Bedeir GA. Venous tension patterns in cord veins. I. In normal and varicocele individuals. *J Urol*. 1980 Mar;123(3):383-5. X-2, X-3.

1982. Shafik A, Shafik AA, El Sibai O, et al. Inguinal canal dilatation: a novel technique for the repair of failed testicular descent despite hormonal treatment. *Am Surg*. 2008 Jan;74(1):69-72. X-4, X-5, X-6.
1983. Shalaby R, Ismail M, Dorgham A, et al. Laparoscopic hernia repair in infancy and childhood: evaluation of 2 different techniques. *J Pediatr Surg*. 2010 Nov;45(11):2210-6. X-2, X-3.
1984. Shalet SM, Tsatsoulis A, Whitehead E, et al. Vulnerability of the human Leydig cell to radiation damage is dependent upon age. *J Endocrinol*. 1989 Jan;120(1):161-5. X-3.
1985. Sham JS, Choy D, Chan KW, et al. Seminoma of normally-descended and cryptorchid testis. *Eur J Surg Oncol*. 1990 Feb;16(1):33-6. X-3, X-4, X-5, X-6.
1986. Shamsa A, Shakeri MT, Amirzargar MA, et al. Male fertility after spermatocele formation from tunica vaginalis in patients with bilateral vas agenesis. *Saudi J Kidney Dis Transpl*. 2008 Jul;19(4):583-6. X-2, X-3.
1987. ShangGuan W, Lian Q, Li J, et al. Clinical pharmacology of cisatracurium during nitrous oxide-propofol anesthesia in children. *Journal of Clinical Anesthesia*. 2008 September;20(6):411-414. X-4, X-5, X-6.
1988. Shannon RS, Mann JR, Harper E, et al. Wilms's tumour and aniridia: clinical and cytogenetic features. *Arch Dis Child*. 1982 Sep;57(9):685-90. X-2, X-3.
1989. Sharfuddin A and Kumar S. Renal colic: Keys to diagnosis and management. *Consultant*. 2002 Aug;42(9):1189-1198. X-2, X-3.
1990. Sharland M, Burch M, McKenna WM, et al. A clinical study of Noonan syndrome. *Arch Dis Child*. 1992 Feb;67(2):178-83. X-2, X-3.
1991. Sharlip ID. Surgery of scrotal contents. *Urologic Clinics of North America*. 1987;14(1):145-148. X-3, X-4, X-5, X-6.
1992. Sharma S and Gupta DK. Gender assignment and hormonal treatment for disorders of sexual differentiation. *Pediatr Surg Int*. 2008 Oct;24(10):1131-5. X-3.
1993. Sharma SK and Aggarwal R. Prediction of large esophageal varices in patients with cirrhosis of the liver using clinical, laboratory and imaging parameters. *Journal of Gastroenterology and Hepatology*. 2007 Nov;22(11):1909-1915. X-2, X-3.
1994. Shastry S, Simha V, Godbole K, et al. A novel syndrome of mandibular hypoplasia, deafness, and progeroid features associated with lipodystrophy, undescended testes, and male hypogonadism. *Journal of Clinical Endocrinology and Metabolism*. 2010 October;95(10):E192-E197. X-3.
1995. Sheehan SJ, Tobbia IN, Ismail MA, et al. Persistent Mullerian duct syndrome. Review and report of 3 cases. *Br J Urol*. 1985 Oct;57(5):548-51. X-3.
1996. Shefi S, Kaplan K and Turek PJ. Analysis of spermatogenesis in non-obstructive azoospermic and virtually azoospermic men with known testicular pathology. *Reprod Biomed Online*. 2009 Apr;18(4):460-4. X-2, X-3.
1997. Shehata SM. Laparoscopically assisted gradual controlled traction on the testicular vessels: a new concept in the management of abdominal testis. A preliminary report. *Eur J Pediatr Surg*. 2008 Dec;18(6):402-6. X-4, X-5, X-6.
1998. Sheynkin YR, Hendin BN, Schlegel PN, et al. Microsurgical repair of iatrogenic injury to the vas deferens. *J Urol*. 1998 Jan;159(1):139-41. X-2, X-3.
1999. Sheynkin YR, Sukkarieh T, Lipke M, et al. Management of nonpalpable testicular tumors. *Urology*. 2004 Jun;63(6):1163-7; discussion 1167. X-2, X-3.
2000. Shima H, Yabumoto H, Okamoto E, et al. Testicular function in patients with hypospadias associated with enlarged prostatic utricle. *Br J Urol*. 1992 Feb;69(2):192-5. X-2, X-3.
2001. Shimada K, Hosokawa S, Tohda A, et al. Histology of the fetal prune belly syndrome with reference to the efficacy of prenatal decompression. *Int J Urol*. 2000 May;7(5):161-6. X-2, X-3.
2002. Shin D, Lipshultz LI, Goldstein M, et al. Herniorrhaphy with polypropylene mesh causing inguinal vasal obstruction: a preventable cause of obstructive azoospermia. *Ann Surg*. 2005 Apr;241(4):553-8. X-2, X-3.
2003. Shioshvili TI. Bilateral abdominal cryptorchidism in males: autotransplantation of the testis. *Eur Urol*. 1985;11(6):386-7. X-4, X-5, X-6.
2004. Shipp TD and Benacerraf BR. The significance of prenatally identified isolated clubfoot: is amniocentesis indicated? *Am J Obstet Gynecol*. 1998 Mar;178(3):600-2. X-2, X-3.
2005. Shiraishi K, Shimabukuro T and Naito K. Effects of hemodialysis on testicular volume and oxidative stress in humans. *J Urol*. 2008 Aug;180(2):644-50. X-2, X-3.
2006. Shiraishi K, Takihara H and Matsuyama H. Effects of grade 1 varicocele detected in the pediatric age-group on testicular development. *J Pediatr Surg*. 2009 Oct;44(10):1995-8. X-2, X-3.
2007. Shiryazdi SM, Modir A, Benrazavi S, et al. Causes of delay in proper treatment of patients with undescended testis. *Iranian Journal of Reproductive Medicine*. 2011;9(1):37-40. X-3, X-4, X-5, X-6.
2008. Shrestha GK, Ikoma F, Schumacher S, et al. Asymptomatic vesicoureteral reflux in children. *Int Urol Nephrol*. 1994;26(3):283-91. X-3.
2009. Shukla AR, Huff DS, Canning DA, et al. Juvenile granulosa cell tumor of the testis: Contemporary clinical management and pathological diagnosis. *Journal of Urology*. 2004 May;171(5):1900-1902. X-2, X-3.
2010. Sica GS, Di Lorenzo N, Sileri P, et al. Microsurgery and changes in the testicular and epididymal production of spermatozoa. *Ann Ital Chir*. 1996 Sep-Oct;67(5):677-80; discussion 681. X-2, X-3.

2011. Sidler D, Brown RA, Millar AJ, et al. A 25-year review of the acute scrotum in children. *S Afr Med J*. 1997 Dec;87(12):1696-8. X-2, X-3.
2012. Sigman M and Jarow JP. Ipsilateral testicular hypotrophy is associated with decreased sperm counts in infertile men with varicoceles. *J Urol*. 1997 Aug;158(2):605-7. X-2, X-3.
2013. Sih R, Morley JE, Kaiser FE, et al. Testosterone replacement in older hypogonadal men: a 12-month randomized controlled trial. *J Clin Endocrinol Metab*. 1997 Jun;82(6):1661-7. X-2, X-3.
2014. Sijstermans K, Hack WW, van der Voort-Doedens LM, et al. Long-term testicular growth and position after orchidopexy for congenital undescended testis. *Urol Int*. 2009;83(4):438-45. X-4, X-5, X-6.
2015. Sijstermans K, Hack WW, van der Voort-Doedens LM, et al. Puberty stage and spontaneous descent of acquired undescended testis: implications for therapy? *Int J Androl*. 2006 Dec;29(6):597-602. X-3.
2016. Sikka M and Agarwal S. Bilateral testicular biopsy--is it necessary? *Indian J Pathol Microbiol*. 1991 Jul;34(3):172-5. X-2, X-3.
2017. Siklar Z, Berberoglu M, Adiyaman P, et al. Disorders of gonadal development: a broad clinical, cytogenetic and histopathologic spectrum. *Pediatr Endocrinol Rev*. 2007 Mar;4(3):210-7. X-2, X-3.
2018. Silber SJ. The intra-abdominal testes: microvascular autotransplantation. *J Urol*. 1981 Mar;125(3):329-33. X-3, X-4, X-5, X-6.
2019. Silber SJ, Nagy Z, Devroey P, et al. Distribution of spermatogenesis in the testicles of azoospermic men: the presence or absence of spermatids in the testes of men with germinal failure. *Hum Reprod*. 1997 Nov;12(11):2422-8. X-2, X-3.
2020. Silber SJ, Nagy ZP, Liu J, et al. Conventional in-vitro fertilization versus intracytoplasmic sperm injection for patients requiring microsurgical sperm aspiration. *Hum Reprod*. 1994 Sep;9(9):1705-9. X-2, X-3.
2021. Simoni M, Tuttelmann F, Gromoll J, et al. Clinical consequences of microdeletions of the Y chromosome: the extended Munster experience. *Reprod Biomed Online*. 2008 Feb;16(2):289-303. X-2, X-3.
2022. Simoni M, Tuttelmann F, Michel C, et al. Polymorphisms of the luteinizing hormone/chorionic gonadotropin receptor gene: Association with maldescended testes and male infertility. *Pharmacogenetics and Genomics*. 2008 Mar;18 (3):193-200. X-3.
2023. Simpson AS, Laugesen M, Silva PA, et al. The prevalence of retained testes in Dunedin. *N Z Med J*. 1985 Sep 11;98(786):758-60. X-3.
2024. Simsek F, Hayran O, Tarcan T, et al. Social and medical aspects of undescended testes in Turkey. *Eur Urol*. 1995;28(2):161-4. X-3.
2025. Singer R, Dickerman Z, Sagiv M, et al. Endocrinological parameters and cell-mediated immunity postoperation for cryptorchidism. *Arch Androl*. 1988;20(2):153-7. X-3.
2026. Singer R, Lahav M, Barnet M, et al. Acrosome reaction of sperm/binding of peanut agglutinin in sperm of varicocele patients. *Molecular Andrology*. 1995;7 (3-4):215-221. X-2, X-3.
2027. Singh H and Sharma B. Vasoplasty: flap operation. *Br J Urol*. 1983 Apr;55(2):233-4. X-2, X-3.
2028. Singh JP, Chaturvedi NK and Chawla R. A new approach in evaluation of fertility in surgically treated cryptorchids. *Acta Eur Fertil*. 1987 Sep-Oct;18(5):321-7. X-3, X-4, X-5, X-6.
2029. Singh PA, Singh M, Misra V, et al. Testicular biopsy in infertility. *J Indian Med Assoc*. 1999 Dec;97(12):482-5. X-2, X-3.
2030. Singh TG, Sarma BB, Chinglensana L, et al. Surgical management of inguinal hernia and hydrocele in children: A retrospective study. *JMS - Journal of Medical Society*. 2006 Sep;20 (3):132-135. X-3.
2031. Sinha CK, Vinay S, Kulkarni R, et al. Delayed diagnosis for undescended testes. *Indian Pediatr*. 2008 Jun;45(6):503-4. X-3.
2032. Sinisi AA, Di Finizio B, Lettieri F, et al. Late gonadal function and autoimmunization in familial testicular torsion. *Arch Androl*. 1993 May-Jun;30(3):147-52. X-2, X-3.
2033. Siracusa F, Di Pace MR, Cataliotti F, et al. Testicular tumors in childhood: A national report. *Pediatric Surgery International*. 1993;8 (3):244-247. X-2, X-3.
2034. Sirvent JJ, Bernat R, Rodriguez Tolra J, et al. Postpubertal cryptorchism. Morphofunctional study with special reference to Leydig's cells. *Eur Urol*. 1989;16(6):433-9. X-2, X-3.
2035. Skakkebaek NE. *Endocrine Abstracts*. [Conference Abstract]. 2010;Conference: 12th European Congress of Endocrinology 2010, ECE 2010 Prague Czech Republic. Conference Start: 20100424 Conference End: 20100428. Conference: 12th European Congress of Endocrinology 2010, ECE 2010 Prague Czech Republic. Conference Start: 20100424 Conference End: 20100428. Conference Publication: (var.pagings). 22:PL2. X-3.
2036. Skakkebaek NE, Holm M, Hoei-Hansen C, et al. Association between testicular dysgenesis syndrome (TDS) and testicular neoplasia: evidence from 20 adult patients with signs of maldevelopment of the testis. *APMIS*. 2003 Jan;111(1):1-9; discussion 9-11. X-2, X-3.
2037. Skinner DG. Advanced metastatic testicular cancer: the need for reporting results according to initial extent of disease. *J Urol*. 1982 Aug;128(2):312-4. X-2, X-3.
2038. Skinnider BF and Young RH. Infarcted adenomatoid tumor: a report of five cases of a facet of a benign neoplasm that may cause diagnostic difficulty. *Am J Surg Pathol*. 2004 Jan;28(1):77-83. X-2, X-3.

2039. Skotheim RI, Kraggerud SM, Fossa SD, et al. Familial/bilateral and sporadic testicular germ cell tumors show frequent genetic changes at loci with suggestive linkage evidence. *Neoplasia*. 2001 May-Jun;3(3):196-203. X-2, X-3.
2040. Slater AJ, James KW, Fifield R, et al. The investigation and treatment of germ cell tumours of the testis. *Clin Radiol*. 1981 Jan;32(1):25-30. X-2, X-3.
2041. Slot B and Meijerhorst GC. Venography of the left internal spermatic vein in patients with fertility problems. *Diagn Imaging*. 1982;51(5):214-23. X-1, X-2, X-3.
2042. Slowikowska-Hilczner J, Guminska A and Kula K. Pathogenesis and active prevention of testicular germ cell neoplasia. *Journal fur Reproduktionsmedizin und Endokrinologie*. 2007;4 (6):313-321. X-3.
2043. Slowikowska-Hilczner J, Romer TE and Kula K. Neoplastic potential of germ cells in relation to disturbances of gonadal organogenesis and changes in karyotype. *J Androl*. 2003 Mar-Apr;24(2):270-8. X-2, X-3.
2044. Slowikowska-Hilczner J, Walczak-Jedrzejowska R and Kula K. Immunohistochemical diagnosis of preinvasive germ cell cancer of the testis. *Folia Histochem Cytobiol*. 2001;39(2):67-72. X-2, X-3.
2045. Small CM, DeCaro JJ, Terrell ML, et al. Maternal exposure to a brominated flame retardant and genitourinary conditions in male offspring. *Environ Health Perspect*. 2009 Jul;117(7):1175-9. X-2, X-3.
2046. Smalley SR, Evans RG, Richardson RL, et al. Radiotherapy as initial treatment for bulky stage II testicular seminomas. *J Clin Oncol*. 1985 Oct;3(10):1333-8. X-2, X-3.
2047. Smevik B and Klepp O. The risk of spontaneous pneumothorax in patients with osteogenic sarcoma and testicular cancer. *Cancer*. 1982 Apr 15;49(8):1734-7. X-2, X-3.
2048. Smit M, Romijn JC, Wildhagen MF, et al. Sperm chromatin structure is associated with the quality of spermatogenesis in infertile patients. *Fertility and Sterility*. 2010 October;94 (5):1748-1752. X-2, X-3.
2049. Smith GC, Powell A, Reynolds K, et al. The five year school medical--time for change. *Arch Dis Child*. 1990 Feb;65(2):225-7. X-3.
2050. Smith JA, Hutson JM, Beasley SW, et al. The relationship between cerebral palsy and cryptorchidism. *J Pediatr Surg*. 1989 Dec;24(12):1303-5. X-3.
2051. Smith JA, Jr. and Urry RL. Testicular histology after prolonged treatment with a gonadotropin-releasing hormone analogue. *J Urol*. 1985 Apr;133(4):612-4. X-2, X-3.
2052. Smith JF, Wayment RO, Cartwright PC, et al. Genitourinary anomalies of pediatric FG syndrome. *J Urol*. 2007 Aug;178(2):656-9. X-3.
2053. Smith NM, Byard RW and Bourne AJ. Testicular regression syndrome - A pathological study of 77 cases. *Histopathology*. 1991;19 (3):269-272. X-2, X-3.
2054. Smith NM, Byard RW and Bourne AJ. Testicular regression syndrome--a pathological study of 77 cases. *Histopathology*. 1991 Sep;19(3):269-72. X-2, X-3.
2055. Snodgrass W, Chen K and Harrison C. Initial scrotal incision for unilateral nonpalpable testis. *J Urol*. 2004 Oct;172(4 Pt 2):1742-5; discussion 1745. X-4, X-5, X-6.
2056. Snodgrass WT, Yucel S and Ziada A. Scrotal exploration for unilateral nonpalpable testis. *J Urol*. 2007 Oct;178(4 Pt 2):1718-21. X-4, X-5, X-6.
2057. Snyder HM, 3rd. Bilateral undescended testes. *Eur J Pediatr*. 1993;152 Suppl 2:S45-6. X-1, X-3.
2058. Soderstrom KO. Tubular hyalinization in human testis. *Andrologia*. 1986 Jan-Feb;18(1):97-103. X-3.
2059. Sokal M, Peckham MJ and Hendry WF. Bilateral germ cell tumours of the testis. *Br J Urol*. 1980 Apr;52(2):158-62. X-2, X-3.
2060. Sokol RZ. Endocrinology of male infertility: Evaluation and treatment. *Seminars in Reproductive Medicine*. 2009 March;27 (2):149-158. X-3.
2061. Soler C, Perez F, Pertusa J, et al. Morphological and quantitative study of multinucleated bodies appearing in rat seminiferous tubules after bilateral caput epididymectomy. *International Journal of Fertility*. 1992;37 (4):237-243. X-2, X-3.
2062. Solivetti FM, Drusco A, Pizzi G, et al. Percutaneous vesiculodeferentography in the diagnosis of male infertility: A review of our results and the data reported in the literature. *Journal of Ultrasound*. 2008 September;11 (3):102-106. X-3.
2063. Song GS and Seo JT. Changes in the scrotal temperature of subjects in a sedentary posture over a heated floor. *Int J Androl*. 2006 Aug;29(4):446-57. X-2, X-3.
2064. Song NH, Wu HF, Zhang W, et al. Screening for Y chromosome microdeletions in idiopathic and nonidiopathic infertile men with varicocele and cryptorchidism. *Chin Med J (Engl)*. 2005 Sep 5;118(17):1462-7. X-2, X-3.
2065. Sonke GS, Chang S, Strom SS, et al. Prenatal and perinatal risk factors and testicular cancer: a hospital-based case-control study. *Oncol Res*. 2007;16(8):383-7. X-2, X-3.
2066. Sonksen J, Ohi DA, Giwercman A, et al. Effect of repeated ejaculation on semen quality in spinal cord injured men. *J Urol*. 1999 Apr;161(4):1163-5. X-2, X-3.
2067. Sonne SB, Hoei-Hansen CE, Fisher JS, et al. Do environmental factors play a role in the aetiology of carcinoma in situ testis and the testicular dysgenesis syndrome? *Verh Dtsch Ges Pathol*. 2004;88:144-51. X-2, X-3.

2068. Sonneveld DJ, Schraffordt Koops H, Sleijfer DT, et al. Bilateral testicular germ cell tumours in patients with initial stage I disease: prevalence and prognosis—a single centre's 30 years' experience. *Eur J Cancer*. 1998 Aug;34(9):1363-7. X-2, X-3.
2069. Soosay GN, Bobrow L, Happerfield L, et al. Morphology and immunohistochemistry of carcinoma in situ adjacent to testicular germ cell tumours in adults and children: implications for histogenesis. *Histopathology*. 1991 Dec;19(6):537-44. X-2, X-3.
2070. Sorber M, Feitz WF and de Vries JD. Short- and mid-term outcome of different types of one-stage hypospadias corrections. *Eur Urol*. 1997;32(4):475-9. X-3.
2071. Sorensen MD, Galansky SH, Striagl AM, et al. Perinatal extravaginal torsion of the testis in the first month of life is a salvageable event. *Urology*. 2003 01 Jul;62 (1):132-134. X-2, X-3.
2072. Sousa A, Gayoso R, Lopez-Bellido D, et al. Laparoscopic assessment and orchidectomy for the adult undescended testis. *Surg Laparosc Endosc Percutan Tech*. 2000 Dec;10(6):420-2. X-2.
2073. Sousa AP, Tavares RS, Velez de la Calle JF, et al. Dual use of Diff-Quik-like stains for the simultaneous evaluation of human sperm morphology and chromatin status. *Hum Reprod*. 2009 Jan;24(1):28-36. X-2, X-3.
2074. Soyer T, Tosun A, Aydin G, et al. Evaluation of genitofemoral nerve motor conduction in inguinoscrotal pathologies. *J Pediatr Surg*. 2008 Aug;43(8):1540-2. X-3.
2075. Sparnon A, Guiney EJ and Puri P. The vanishing testis. *Pediatric Surgery International*. [Journal]. 1986;1 (4):227-228. X-3, X-4, X-5, X-6.
2076. Spermon JR, Kiemeneij LA, Meuleman EJ, et al. Fertility in men with testicular germ cell tumors. *Fertil Steril*. 2003 Jun;79 Suppl 3:1543-9. X-2, X-3.
2077. Spires SE, Woolums CS, Pulito AR, et al. Testicular regression syndrome: a clinical and pathologic study of 11 cases. *Arch Pathol Lab Med*. 2000 May;124(5):694-8. X-2, X-3.
2078. Spitz MR, Sider JG, Pollack ES, et al. Incidence and descriptive features of testicular cancer among United States whites, blacks, and Hispanics, 1973-1982. *Cancer*. 1986 Oct 15;58(8):1785-90. X-2, X-3.
2079. Spivak H, Nudelman I, Fuco V, et al. Laparoscopic extraperitoneal inguinal hernia repair with spinal anesthesia and nitrous oxide insufflation. *Surg Endosc*. 1999 Oct;13(10):1026-9. X-2, X-3.
2080. Springer A, Huber C, Reck CA, et al. Delayed referral despite appropriate knowledge in cryptorchidism as a cause of delayed orchidopexies in Austria. *Klin Padiatr*. 2010 Jul;222(4):248-51. X-3.
2081. Srikanth MS, West BR, Ishitani M, et al. Benign testicular tumors in children with congenital adrenal hyperplasia. *J Pediatr Surg*. 1992 May;27(5):639-41. X-2, X-3.
2082. Sripada S, Amezaga MR, Hamilton M, et al. Absence of chlamydial deoxyribonucleic acid from testicular and epididymal samples from men with obstructive azoospermia. *Fertil Steril*. 2010 Feb;93(3):833-6. X-2, X-3.
2083. Sripathi V. Laparoscopy in pediatric practice. *Indian Journal of Practical Pediatrics*. 2004 Jul;6 (3):243-248. X-1, X-2, X-3.
2084. Srivastava A, Raghavendran M, Jain M, et al. Fine-needle aspiration cytology of the testis: can it be a single diagnostic modality in azoospermia? *Urol Int*. 2004;73(1):23-7. X-2, X-3.
2085. Stang A, Ahrens W, Bromen K, et al. Undescended testis and the risk of testicular cancer: importance of source and classification of exposure information. *Int J Epidemiol*. 2001 Oct;30(5):1050-6. X-2, X-3.
2086. Stang A, Jockel KH, Baumgardt-Elms C, et al. Firefighting and risk of testicular cancer: results from a German population-based case-control study. *Am J Ind Med*. 2003 Mar;43(3):291-4. X-2, X-3.
2087. Stanley MW, Powers CN, Pitman MB, et al. Cytology of germ cell tumors: extragonadal, extracranial masses and intraoperative problems. *Cancer*. 1997 Aug 25;81(4):220-7. X-2, X-3.
2088. Stanley P. Computed tomographic evaluation of the retroperitoneum in infants and children. *J Comput Tomogr*. 1983 Feb;7(1):63-75. X-3.
2089. Steckel J, Dicker AP and Goldstein M. Relationship between varicocele size and response to varicocelectomy. *J Urol*. 1993 Apr;149(4):769-71. X-2, X-3.
2090. Steigman CK, Sotelo-Avila C and Weber TR. The incidence of spermatic cord structures in inguinal hernia sacs from male children. *American Journal of Surgical Pathology*. 1999 Aug;23 (8):880-885. X-2, X-3.
2091. Steinbrecher HA and Malone PS. Testicular problems in children. *Paediatrics and Child Health*. 2008 Jun;18 (6):264-267. X-1, X-2, X-3.
2092. Steiner H, Holtl L, Maneschg C, et al. Frozen section analysis-guided organ-sparing approach in testicular tumors: technique, feasibility, and long-term results. *Urology*. 2003 Sep;62(3):508-13. X-2, X-3.
2093. Steiner H, Muller T, Gozzi C, et al. Two cycles of cisplatin-based chemotherapy for low-volume retroperitoneal stage II nonseminomatous germ cell tumours. *BJU International*. 2006 Aug;98 (2):349-352. X-3, X-4, X-5, X-6.
2094. Steiner H, Zangerl F, Stohr B, et al. Results of bilateral nerve sparing laparoscopic retroperitoneal lymph node dissection for testicular cancer. *J Urol*. 2008 Oct;180(4):1348-52; discussion 1352-3. X-2, X-3.
2095. Steinmetz L, Rocha MN, Longui CA, et al. Inhibin A production after gonadotropin stimulus: a new method to detect ovarian tissue in ovotesticular disorder of sex development. *Horm Res*. 2009;71(2):94-9. X-3.
2096. Steven M, Greene O, Nelson A, et al. Contralateral inguinal exploration in premature neonates: Is it necessary? *Pediatric Surgery International*. 2010 July;26 (7):703-706. X-2, X-3.
2097. Stewart RJ, Boyd S, Brown S, et al. The blood-testis barrier in experimental unilateral cryptorchidism. *J Pathol*. 1990 Jan;160(1):51-5. X-2, X-3.

2098. Steyerberg EW, Keizer HJ, Messemer JE, et al. Residual pulmonary masses after chemotherapy for metastatic nonseminomatous germ cell tumor. Prediction of histology. ReHiT Study Group. *Cancer*. 1997 Jan 15;79(2):345-55. X-2, X-3.
2099. Stikkelbroeck NM, Otten BJ, Pasic A, et al. High prevalence of testicular adrenal rest tumors, impaired spermatogenesis, and Leydig cell failure in adolescent and adult males with congenital adrenal hyperplasia. *J Clin Endocrinol Metab*. 2001 Dec;86(12):5721-8. X-2, X-3.
2100. Stikkelbroeck NM, Suliman HM, Otten BJ, et al. Testicular adrenal rest tumours in postpubertal males with congenital adrenal hyperplasia: sonographic and MR features. *Eur Radiol*. 2003 Jul;13(7):1597-603. X-2, X-3.
2101. Stipoljev F, Vujisic S, Parazajder J, et al. Cytogenetic analysis of azoospermic patients: karyotype comparison of peripheral blood lymphocytes and testicular tissue. *Eur J Obstet Gynecol Reprod Biol*. 2006 Feb 1;124(2):197-203. X-2, X-3.
2102. Stoehr B, Zangerl F, Steiner E, et al. Routine scrotal ultrasonography during the follow-up of patients with testicular cancer leads to earlier detection of asynchronous tumours and a high rate of organ preservation. *BJU International*. 2010 April;105 (8):1118-1120. X-2, X-3.
2103. Stone JM, Cruickshank DG, Sandeman TF, et al. Laterality, maldescent, trauma and other clinical factors in the epidemiology of testis cancer in Victoria, Australia. *Br J Cancer*. 1991 Jul;64(1):132-8. X-2, X-3.
2104. Storm D, Redden T, Aguiar M, et al. Histologic evaluation of the testicular remnant associated with the vanishing testes syndrome: is surgical management necessary? *Urology*. 2007 Dec;70(6):1204-6. X-2, X-3.
2105. Strader CH, Weiss NS and Daling JR. Vasectomy and the incidence of testicular cancer. *Am J Epidemiol*. 1988 Jul;128(1):56-63. X-2, X-3.
2106. Strader CH, Weiss NS, Daling JR, et al. Cryptorchidism, orchiopexy, and the risk of testicular cancer. *Am J Epidemiol*. 1988 May;127(5):1013-8. X-2, X-3.
2107. Strandberg-Larsen K, Jensen MS, Ramlau-Hansen CH, et al. Alcohol binge drinking during pregnancy and cryptorchidism. *Hum Reprod*. 2009 Dec;24(12):3211-9. X-3.
2108. Stratakis CA, Papageorgiou T, Premkumar A, et al. Ovarian lesions in Carney complex: clinical genetics and possible predisposition to malignancy. *J Clin Endocrinol Metab*. 2000 Nov;85(11):4359-66. X-2, X-3.
2109. Strom KH and Levine LA. Microsurgical denervation of the spermatic cord for chronic orchialgia: long-term results from a single center. *J Urol*. 2008 Sep;180(3):949-53. X-2, X-3.
2110. Sucullu I, Filiz AI, Sen B, et al. The effects of inguinal hernia repair on testicular function in young adults: a prospective randomized study. *Hernia*. 2010 Apr;14(2):165-9. X-2, X-3.
2111. Suga K, Ariyoshi I, Nakanishi T, et al. Clinical study of varicocele by sequential scrotal scintigraphy. *Andrologia*. 1990 Nov-Dec;22(6):525-9. X-2, X-3.
2112. Sukhotnik I, Bernshteyn A and Mogilner JG. The basic biology of apoptosis and its implications for pediatric surgery. *European Journal of Pediatric Surgery*. 2005 Aug;15 (4):229-235. X-1, X-2, X-3.
2113. Sullivan JG, Gohel M and Kinder RB. Ectopic adrenocortical tissue found at groin exploration in children: incidence in relation to diagnosis, age and sex. *BJU Int*. 2005 Feb;95(3):407-10. X-3.
2114. Sultan Sheriff D. Further studies on testicular lipids and glycogen in human patients with unilateral varicocele. *Andrologia*. 1984 Sep-Oct;16(5):442-5. X-2, X-3.
2115. Sun N, Cheung TT, Khong PL, et al. Varicocele: Laparoscopic clipping and color Doppler follow-up. *J Pediatr Surg*. 2001 Nov;36(11):1704-7. X-2, X-3.
2116. Surana R and Puri P. Is contralateral exploration necessary in infants with unilateral inguinal hernia? *J Pediatr Surg*. 1993 Aug;28(8):1026-7. X-2, X-3.
2117. Surana R and Puri P. Iatrogenic ascent of the testis: an under-recognized complication of inguinal hernia operation in children. *Br J Urol*. 1994 May;73(5):580-1. X-2, X-3.
2118. Suskind A, Hayner-Buchan A, Feustel PJ, et al. Fibrosis correlates with detailed histological analysis of human undescended testes. *BJU Int*. 2008 Jun;101(11):1441-5. X-4, X-5, X-6.
2119. Sussi PL, Azzolina LS, Erbicci L, et al. Heterogeneous distribution of nuclear DNA content in tumors of the adrenal glands. *Journal of Experimental and Clinical Cancer Research*. 1996 Jun;15 (2):115-121. X-2, X-3.
2120. Sutcliffe JR, Wilson-Storey D and Smith NM. Ante-natal testicular torsion: only one cause of the testicular regression syndrome? *J R Coll Surg Edinb*. 1996 Apr;41(2):99-101. X-2, X-3.
2121. Sutherland RS and Kogan BA. Therapeutic laparoscopy for the nonpalpable testicle. *Tech Urol*. 1996 Fall;2(3):142-6. X-4, X-5, X-6.
2122. Suzuki Y, Sasagawa I, Ashida J, et al. Screening for mutations of the androgen receptor gene in patients with isolated cryptorchidism. *Fertil Steril*. 2001 Oct;76(4):834-6. X-2, X-3.
2123. Suzuki Y, Sasagawa I, Itoh K, et al. 5Alpha-reductase type 2 genes in Japanese males do not appear to be associated with cryptorchidism. *Fertil Steril*. 2002 Aug;78(2):330-4. X-2, X-3.
2124. Suzuki Y, Sasagawa I, Tateno T, et al. Absence of microdeletions in the Y chromosome in patients with Prader-Willi syndrome with cryptorchidism. *Int J Androl*. 2002 Feb;25(1):1-5. X-3.
2125. Swartz MA, Morgan TM and Krieger JN. Complications of Scrotal Surgery for Benign Conditions. *Urology*. 2007 Apr;69 (4):616-619. X-3.
2126. Swerdlow AJ, De Stavola BL, Swanwick MA, et al. Risk factors for testicular cancer: a case-control study in twins. *Br J Cancer*. 1999 Jun;80(7):1098-102. X-2, X-3.

2127. Swerdlow AJ, Huttly SR and Smith PG. Testicular cancer and antecedent diseases. *Br J Cancer*. 1987 Jan;55(1):97-103. X-2, X-3.
2128. Swerdlow AJ, Huttly SR and Smith PG. Is the incidence of testis cancer related to trauma or temperature? *Br J Urol*. 1988 Jun;61(6):518-21. X-2, X-3.
2129. Swerdlow AJ and Melzer D. The value of England and Wales congenital malformation notification scheme data for epidemiology: male genital tract malformations. *J Epidemiol Community Health*. 1988 Mar;42(1):8-13. X-3.
2130. Swerdlow AJ, Wood KH and Smith PG. A case-control study of the aetiology of cryptorchidism. *J Epidemiol Community Health*. 1983 Sep;37(3):238-44. X-3.
2131. Sylvia S, Kakarlapudi SV, Vollala VR, et al. Bilateral variant testicular arteries with double renal arteries. *Cases Journal*. 2009;2 (2)(114). X-2, X-3.
2132. Szabo R and Kessler R. Hydrocele following internal spermatic vein ligation: a retrospective study and review of the literature. *J Urol*. 1984 Nov;132(5):924-5. X-2, X-3.
2133. Szczerba K, Kulhawik J, Wylezek D, et al. Shouldice's primary inguinal hernia repair - 5-Year results. [Polish, English]. *Polski Przegląd Chirurgicalny*. 2002;74 (12):1157-1162. X-2, X-3.
2134. Szpinda M, Frackiewicz P, Flisinski P, et al. The retroperitoneal anastomoses of the gonadal veins in human fetuses. *Folia Morphol (Warsz)*. 2005 May;64(2):72-7. X-2, X-3.
2135. Tackett LD, Patel SR and Caldamone AA. A history of cryptorchidism: Lessons from the eighteenth century. *Journal of Pediatric Urology*. 2007 Dec;3 (6):426-432. X-1, X-2, X-3.
2136. Tackett LD, Wacksman J, Billmire D, et al. The high intra-abdominal testis: technique and long-term success of laparoscopic testicular autotransplantation. *J Endourol*. 2002 Aug;16(6):359-61. X-4, X-5, X-6.
2137. Taha SA. Male pseudohermaphroditism: factors determining the gender of rearing in Saudi Arabia. *Urology*. 1994 Mar;43(3):370-4. X-3.
2138. Tajima Y, Watanabe D, Koshimizu U, et al. Insulin-like growth factor-I and transforming growth factor-alpha stimulate differentiation of type A spermatogonia in organ culture of adult mouse cryptorchid testes. *Int J Androl*. 1995 Feb;18(1):8-12. X-2, X-3.
2139. Takahashi M, Kurokawa Y, Nakanishi R, et al. Low transscrotal orchidopexy is a safe and effective approach for undescended testes distal to the external inguinal ring. *Urol Int*. 2009;82(1):92-6. X-4, X-5, X-6.
2140. Takano T, Matsuwake K, Yoshioka S, et al. Congenital polymicrogyria including the perisylvian region in early childhood. *Congenital Anomalies*. 2010 March;50 (1):64-67. X-2, X-3.
2141. Takehara H, Yakabe S and Kameoka K. Laparoscopic percutaneous extraperitoneal closure for inguinal hernia in children: clinical outcome of 972 repairs done in 3 pediatric surgical institutions. *J Pediatr Surg*. 2006 Dec;41(12):1999-2003. X-2, X-3.
2142. Takihara H, Baba Y, Ishizu K, et al. Testicular development following unilateral orchiopexy measured by a new orchimeter. *Urology*. 1990 Oct;36(4):370-2. X-4, X-5, X-6.
2143. Tal R, Holland R, Belenky A, et al. Incidental testicular tumors in infertile men. *Fertil Steril*. 2004 Aug;82(2):469-71. X-2, X-3.
2144. Talati J and Sheikh H. Sertoli cell only syndrome (SECOS): lessons from case studies. *J Pak Med Assoc*. 1991 Sep;41(9):219-23. X-2, X-3.
2145. Tam YH, Lee KH, Sihoe JD, et al. Laparoscopic hernia repair in children by the hook method: a single-center series of 433 consecutive patients. *J Pediatr Surg*. 2009 Aug;44(8):1502-5. X-2, X-3.
2146. Tamhne RC, Jarvis SN and Waterston AJ. Auditing community screening for undescended testes. *Arch Dis Child*. 1990 Aug;65(8):888-90. X-3.
2147. Tan TW, Lee KM and Chua EJ. Testicular seminoma--the results of treatment by radiotherapy in Singapore. *Ann Acad Med Singapore*. 1996 May;25(3):363-6. X-2, X-3.
2148. Tan TWK, Lee KM and Chua EJ. Testicular seminoma - The results of treatment by radiotherapy in Singapore. *Annals of the Academy of Medicine Singapore*. 1996 May;25 (3):363-366. X-2, X-3.
2149. Tanaka H, Fujisawa M, Okada H, et al. Apoptosis-related proteins in the testes of infertile men with varicocele. *BJU Int*. 2002 Jun;89(9):905-9. X-2, X-3.
2150. Tanaka T, Kitamura H, Kunishima Y, et al. Modified and bilateral retroperitoneal lymph node dissection for testicular cancer: peri- and postoperative complications and therapeutic outcome. *Jpn J Clin Oncol*. 2006 Jun;36(6):381-6. X-2, X-3.
2151. Tanaka Y, Mizote H, Asakawa T, et al. Clinical significance of plasma diamine oxidase activity in pediatric patients: influence of nutritional therapy and chemotherapy. *Kurume Med J*. 2003;50(3-4):131-7. X-3.
2152. Tannour-Louet M, Han S, Corbett ST, et al. Identification of de novo copy number variants associated with human disorders of sexual development. *PLoS One*. 2010;5(10):e15392. X-3.
2153. Tanyel FC, Dagdeviren A, Muftuoglu S, et al. Inguinal hernia revisited through comparative evaluation of peritoneum, processus vaginalis, and sacs obtained from children with hernia, hydrocele, and undescended testis. *J Pediatr Surg*. 1999 Apr;34(4):552-5. X-3.
2154. Tanyel FC, Erdem S, Altunay H, et al. Distribution and morphometry of fiber types in cremaster muscles of boys with inguinal hernia or undescended testis. *Pathol Res Pract*. 2000;196(9):613-7. X-2, X-3.

2155. Tanyel FC, Erdem S, Buyukpamukcu N, et al. Cremaster muscles obtained from boys with an undescended testis show significant neurological changes. *BJU Int.* 2000 Jan;85(1):116-9. X-3.
2156. Tanyel FC, Erdem S, Buyukpamukcu N, et al. Cremaster muscle is not sexually dimorphic, but that from boys with undescended testis reflects alterations related to autonomic innervation. *J Pediatr Surg.* 2001 Jun;36(6):877-80. X-3.
2157. Tanyel FC, Erdem S, Buyukpamukcu N, et al. Smooth muscle within incomplete obliterations of processus vaginalis lacks apoptotic nuclei. *Urol Int.* 2002;69(1):42-5. X-3.
2158. Tanyel FC, Muftuoglu S, Dagdeviren A, et al. Ultrastructural deficiency in autonomic innervation in cremasteric muscle of boys with undescended testis. *J Pediatr Surg.* 2001 Apr;36(4):573-8. X-3.
2159. Tanyel FC, Ocal T, Karaagaoglu E, et al. Individual and associated effects of length of inguinal canal and caliber of the sac on clinical outcome in children. *J Pediatr Surg.* 2000 Aug;35(8):1165-9. X-3.
2160. Tanyel FC and Okur HD. Autonomic nervous system appears to play a role in obliteration of processus vaginalis. *Hernia.* 2004 May;8(2):149-54. X-3.
2161. Tanyel FC, Sara Y, Ertunc M, et al. Lack of carbachol response indicates the absence of cholinergic receptors in sacs associated with undescended testis. *J Pediatr Surg.* 1999 Sep;34(9):1339-44. X-3.
2162. Tanyel FC, Talim B, Atilla P, et al. Myogenesis within the human gubernaculum: histological and immunohistochemical evaluation. *Eur J Pediatr Surg.* 2005 Jun;15(3):175-9. X-2, X-3.
2163. Tanyel FC, Talim B, Kale G, et al. Differences in the morphology of the processus vaginalis with sex and underlying disease condition. *Pathol Res Pract.* 2000;196(11):767-70. X-2, X-3.
2164. Tanyel FC, Yuzbasioglu A, Kocaege C, et al. Androgen receptor immunostaining and androgen receptor messenger ribonucleic acid expression are increased in cremaster muscles associated with undescended testis. *Urology.* 2006 Apr;67(4):855-8. X-3, X-9.
2165. Tarantino L, Giorgio A, de Stefano G, et al. Echo color Doppler findings in postpubertal mumps epididymo-orchitis. *J Ultrasound Med.* 2001 Nov;20(11):1189-95. X-2, X-3.
2166. Tartaglia M, Gelb BD and Zenker M. Noonan syndrome and clinically related disorders. *Best Practice and Research: Clinical Endocrinology and Metabolism.* 2011 February;25 (1):161-179. X-1, X-2, X-3.
2167. Tartaglia N, Davis S, Hench A, et al. A new look at XYY syndrome: medical and psychological features. *Am J Med Genet A.* 2008 Jun 15;146A(12):1509-22. X-3.
2168. Tartar VM, Trambert MA, Balsara ZN, et al. Tubular ectasia of the testicle: sonographic and MR imaging appearance. *AJR Am J Roentgenol.* 1993 Mar;160(3):539-42. X-2, X-3.
2169. Tasian GE, Hittelman AB, Kim GE, et al. Age at orchiopexy and testis palpability predict germ and Leydig cell loss: clinical predictors of adverse histological features of cryptorchidism. *J Urol.* 2009 Aug;182(2):704-9. X-3, X-4, X-5, X-6.
2170. Tasian GE, Zaid H, Cabana MD, et al. Proximal hypospadias and risk of acquired cryptorchidism. *J Urol.* 2010 Aug;184(2):715-20. X-3.
2171. Taskinen S, Fagerholm R, Aronniemi J, et al. Testicular tumors in children and adolescents. *J Pediatr Urol.* 2008 Apr;4(2):134-7. X-2, X-3.
2172. Taskinen S, Lehtinen A, Hovatta O, et al. Ultrasonography and colour Doppler flow in the testes of adult patients after treatment of cryptorchidism. *Br J Urol.* 1996 Aug;78(2):248-51. X-4, X-5, X-6.
2173. Taskinen S, Taavitsainen M and Wikstrom S. Measurement of testicular volume: comparison of 3 different methods. *J Urol.* 1996 Mar;155(3):930-3. X-3, X-4, X-5, X-6.
2174. Taskinen S and Wikstrom S. Growth patterns in young men treated for undescended testes in childhood. *Pediatr Surg Int.* 2004 May;20(5):360-2. X-3, X-4, X-5, X-6.
2175. Tauber M, Barbeau C, Jouret B, et al. Auxological and endocrine evolution of 28 children with Prader-Willi syndrome: effect of GH therapy in 14 children. *Horm Res.* 2000;53(6):279-87. X-3.
2176. Taurog JD, Rival C, Dorris M, et al. Arthritis and Rheumatism. [Conference Abstract]. 2010;Conference: American College of Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Meeting, ACR/ARHP 10 Philadelphia, PA United States. Conference Start: 20091016 Conference End: 20091021. Conference: American College of Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Meeting, ACR/ARHP 10 Philadelphia, PA United States. Conference Start: 20091016 Conference End: 20091021. Conference Publication: (var.pagings). 62:1448. X-2, X-3.
2177. Taurog JD, Satumtira N and Dorris ML. Arthritis and Rheumatism. [Conference Abstract]. 2009;Conference: American College of Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Meeting, ACR/ARHP 09 Atlanta, GA United States. Conference Start: 20101106 Conference End: 20101111. Conference: American College of Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Meeting, ACR/ARHP 09 Atlanta, GA United States. Conference Start: 20101106 Conference End: 20101111. Conference Publication: (var.pagings). 60:1168. X-2, X-3, X-9.
2178. Tavolini IM, Bettella A, Boscolo Berto R, et al. Immunostaining for placental alkaline phosphatase on fine-needle aspiration specimens to detect noninvasive testicular cancer: a prospective evaluation in cryptorchid men. *BJU Int.* 2006 May;97(5):950-4. X-3, X-4, X-5, X-6.
2179. Taye K and Bedru A. Pattern of neural tube defects at Tikur Anbessa Hospital, Addis Ababa, Ethiopia. *Ethiop Med J.* 2009 Jan;47(1):71-6. X-3.

2180. Taylor SG, Hair A, Baxter GM, et al. Does contraction of mesh following tension free hernioplasty effect testicular or femoral vessel blood flow? *Hernia*. 2001 Mar;5(1):13-5. X-2, X-3.
2181. Taylor WN. Urological implications of the beckwith-wiedemann syndrome. *J Urol*. 1981 Mar;125(3):439-41. X-3.
2182. Tchovelidze C, Sibony M, Callard P, et al. The testicular biopsy and spermatogenesis disturbance of infertile patients with bilateral varicocele. *Arkh Patol*. 2004 Mar-Apr;66(2):40-5. X-2, X-3.
2183. Teebi AS, Rucquoi JK and Meyn MS. Aarskog syndrome: Report of a family with review and discussion of nosology. *American Journal of Medical Genetics*. 1993;46 (5):501-509. X-2, X-3.
2184. Tekin A, Aygun YC, Aki FT, et al. Bilateral germ cell cancer of the testis: a report of 11 patients with a long-term follow-up. *BJU Int*. 2000 May;85(7):864-8. X-2, X-3.
2185. Termine C, Parigi G, Rossi M, et al. WAGR syndrome: is the 'R' always justified? *Clin Dysmorphol*. 2007 Jan;16(1):69-70. X-3.
2186. Ternavasio-De La Vega HG, Boronat M, Ojeda A, et al. Mumps orchitis in the post-vaccine era (1967-2009) a single-center series of 67 patients and review of clinical outcome and trends. *Medicine*. 2010 March;89 (2):96-116. X-2, X-3.
2187. Terquem A and Dadoune JP. Morphological findings in varicocele: an ultrastructural study of 30 bilateral testicular biopsies. *Int J Androl*. 1981 Oct;4(5):515-31. X-2, X-3.
2188. Testini M, Miniello S, Piccinni G, et al. Microsurgical treatment of varicocele in outpatients using the subinguinal approach. *Minerva Chir*. 2001 Dec;56(6):655-9. X-2, X-3.
2189. Tetik C, Arregui ME, Dulucq JL, et al. Complications and recurrences associated with laparoscopic repair of groin hernias. A multi-institutional retrospective analysis. *Surg Endosc*. 1994 Nov;8(11):1316-22; discussion 1322-3. X-2, X-3.
2190. Theodore C, Terrier-Lacombe MJ, Laplanche A, et al. Bilateral germ-cell tumours: 22-year experience at the Institut Gustave Roussy. *Br J Cancer*. 2004 Jan 12;90(1):55-9. X-2, X-3.
2191. Thijssens K, Vaneerdeweg W, Schrijvers D, et al. Retroperitoneal lymph node dissection as adjuvant therapy in the treatment of non-seminomatous testicular cancer. *Acta Chir Belg*. 2003 Nov-Dec;103(6):599-602. X-2, X-3.
2192. Thomas DB, Jimenez LM, McTiernan A, et al. Breast cancer in men: risk factors with hormonal implications. *Am J Epidemiol*. 1992 Apr 1;135(7):734-48. X-2, X-3.
2193. Thomas GM, Rider WD, Dembo AJ, et al. Seminoma of the testis: results of treatment and patterns of failure after radiation therapy. *Int J Radiat Oncol Biol Phys*. 1982 Feb;8(2):165-74. X-2, X-3.
2194. Thomas JC and Elder JS. Testicular growth arrest and adolescent varicocele: does varicocele size make a difference? *J Urol*. 2002 Oct;168(4 Pt 2):1689-91; discussion 1691. X-2, X-3.
2195. Thomas K, Wood SJ, Thompson AJ, et al. The incidence and significance of testicular microlithiasis in a subfertile population. *Br J Radiol*. 2000 May;73(869):494-7. X-2, X-3.
2196. Thomas WE, Cooper MJ, Crane GA, et al. Testicular exocrine malfunction after torsion. *Lancet*. 1984 Dec 15;2(8416):1357-60. X-2, X-3.
2197. Thompson J, Williams CJ, Whitehouse JM, et al. Bilateral testicular germ cell tumours: an increasing incidence and prevention by chemotherapy. *Br J Urol*. 1988 Oct;62(4):374-6. X-2, X-3.
2198. Thong M, Lim C and Fatimah H. Undescended testes: incidence in 1,002 consecutive male infants and outcome at 1 year of age. *Pediatr Surg Int*. 1998 Jan;13(1):37-41. X-3, X-4, X-5, X-6.
2199. Thornhill JA, Conroy RM, Kelly DG, et al. An evaluation of predisposing factors for testis cancer in Ireland. *Eur Urol*. 1988;14(6):429-33. X-2, X-3.
2200. Thorup J, Cortes D and Petersen BL. The incidence of bilateral cryptorchidism is increased and the fertility potential is reduced in sons born to mothers who have smoked during pregnancy. *J Urol*. 2006 Aug;176(2):734-7. X-3, X-4, X-5, X-6.
2201. Thorup J, Jensen CL, Langballe O, et al. The challenge of early surgery for cryptorchidism. *Scandinavian Journal of Urology and Nephrology*. 2011 April;45 (3):184-189. X-4, X-5, X-6.
2202. Thorup JM, Cortes D and Visfeldt J. Germ cells may survive clipping and division of the spermatic vessels in surgery for intra-abdominal testes. *J Urol*. 1999 Sep;162(3 Pt 1):872-4. X-4, X-5, X-6.
2203. Tiemstra JD and Kapoor S. Evaluation of scrotal masses. *Am Fam Physician*. 2008 Nov 15;78(10):1165-70. X-1, X-2, X-3.
2204. Timmermann G, Acs N, Banhid F, et al. Congenital abnormalities of 88 children born to mothers who attempted suicide with phenobarbital during pregnancy: the use of a disaster epidemiological model for the evaluation of drug teratogenicity. *Pharmacoepidemiol Drug Saf*. 2009 Sep;18(9):815-25. X-2, X-3.
2205. Tiwary CM. Testicular injury in breech delivery: possible implications. *Urology*. 1989 Oct;34(4):210-2. X-3.
2206. Toledano MB, Hansell AL, Jarup L, et al. Temporal trends in orchidopexy, Great Britain, 1992-1998. *Environ Health Perspect*. 2003 Jan;111(1):129-32. X-4, X-5, X-6.
2207. Tollerud DJ, Blattner WA, Fraser MC, et al. Familial testicular cancer and urogenital developmental anomalies. *Cancer*. 1985 Apr 15;55(8):1849-54. X-2, X-3.
2208. Tomamichel GR and Bandhauer K. Seminal carnitine content in obstructive azoospermia. Correlation with the anatomic level of obstruction. *J Androl*. 1986 Sep-Oct;7(5):328-30. X-2, X-3.

2209. Tomita E, Kondo T, Nakazawa H, et al. Successful testis preservation for bilateral testicular tumors with a new chemotherapy-based protocol: initial results of three cases. *Int J Urol*. 2007 Sep;14(9):879-82. X-2, X-3.
2210. Tomita M. Consecutive administration of synthetic LHRH in the evaluation of gonadotrophin reserve in children. *Acta Endocrinol (Copenh)*. 1980 Jul;94(3):289-96. X-2, X-3.
2211. Tomomasa H, Oshio S, Amemiya H, et al. Testicular injury: late results of semen analyses after orchiectomy. *Arch Androl*. 1992 Jul-Aug;29(1):59-63. X-3, X-4, X-5, X-6.
2212. Tomomasa H, Shimizu H, Sato S, et al. Clinical study of testicular germ cell tumors. *Hinyokika Kiyo*. 2001 Jun;47(6):389-95. X-2, X-3.
2213. Toth J, Merksz M and Szonyi P. States causing infertility in adulthood in children with undescended testis. *Acta Chir Hung*. 1987;28(3):243-6. X-3, X-4, X-5, X-6.
2214. Toth L, Bodrogi I, Baki M, et al. Thoracic surgery of testicular cancer patients. *Eur J Surg Oncol*. 1993 Dec;19(6):609-13. X-1, X-2, X-3.
2215. Townsend CL, Willey BA, Cortina-Borja M, et al. Antiretroviral therapy and congenital abnormalities in infants born to HIV-infected women in the UK and Ireland, 1990-2007. *Aids*. 2009 20 Feb;23 (4):519-524. X-3.
2216. Trabert B, Sigurdson AJ, Sweeney AM, et al. Marijuana use and testicular germ cell tumors. *Cancer*. 2011 Feb 15;117(4):848-53. X-2, X-3.
2217. Traupe H and Happel R. Clinical spectrum of steroid sulfatase deficiency: X-linked recessive ichthyosis, birth complications and cryptorchidism. *European Journal of Pediatrics*. 1983;140 (1):19-21. X-3.
2218. Tres LL, Mesrobian HG, Abdullah M, et al. Human Sertoli-spermatogenic cell cocultures prepared from biopsies of cryptorchid testes performed during orchidopexy. *J Urol*. 1989 Apr;141(4):1003-9. X-3.
2219. Trifiro G, Livieri C, Bosio L, et al. Neonatal hypotonia: don't forget the Prader-Willi syndrome. *Acta Paediatr*. 2003 Sep;92(9):1085-9. X-3.
2220. Trigg ME, Steinherz PG, Chappell R, et al. Early testicular biopsy in males with acute lymphoblastic leukemia: lack of impact on subsequent event-free survival. *J Pediatr Hematol Oncol*. 2000 Jan-Feb;22(1):27-33. X-2, X-3.
2221. Tripodi L, Tripodi A, Mammi C, et al. Pharmacological action and therapeutic effects of glutathione on hypokinetic spermatozoa for enzymatic-dependent pathologies and correlated genetic aspects. *Clin Exp Obstet Gynecol*. 2003;30(2-3):130-6. X-2, X-3.
2222. Trivin C, Gluckman E, Leblanc T, et al. Factors and markers of growth hormone secretion and gonadal function in Fanconi anemia. *Growth Horm IGF Res*. 2007 Apr;17(2):122-9. X-3.
2223. Trobs RB, Hoepffner W, Buhligen U, et al. Video-assisted gonadectomy in children with Ullrich Turner syndrome or 46,XY gonadal dysgenesis. *Eur J Pediatr Surg*. 2004 Jun;14(3):179-84. X-2, X-3.
2224. Trombetta C, Savoca G, Siracusano S, et al. Prevalence and incidence of urologic diseases before puberty. *Acta Urologica Italica*. 1996;10 (3):209-220. X-2, X-3.
2225. Trotter C, Martin P, Youngson G, et al. A comparison between ilioinguinal-iliohypogastric nerve block performed by anaesthetist or surgeon for postoperative analgesia following groin surgery in children. *Paediatr Anaesth*. 1995;5(6):363-7. X-3.
2226. Troughton AH, Waring J, Longstaff A, et al. The role of magnetic resonance imaging in the investigation of undescended testes. *Clin Radiol*. 1990 Mar;41(3):178-81. X-2.
2227. Trump DL, Havlin KH, Messing EM, et al. High-dose ketoconazole in advanced hormone-refractory prostate cancer: endocrinologic and clinical effects. *J Clin Oncol*. 1989 Aug;7(8):1093-8. X-2, X-3.
2228. Trussell JC, Haas GP, Wojtowycz A, et al. High prevalence of bilateral varicoceles confirmed with ultrasonography. *Int Urol Nephrol*. 2003;35(1):115-8. X-2, X-3.
2229. Tsai YC, Wu CC and Yang SS. Minilaparoscopic herniorrhaphy with hernia sac transection in children and young adults: a preliminary report. *Surg Endosc*. 2007 Sep;21(9):1623-5. X-2, X-3.
2230. Tsametsis C, Mintziori G, Iliadou PK, et al. *International Journal of Andrology*. [Conference Abstract]. 2010 October; Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference: 6th European Congress of Andrology Athens Greece. Conference Start: 20100929 Conference End: 20101001. Conference Publication: (var.pagings). 33:52. X-2.
2231. Tsatsoulis A, Shalet SM, Morris ID, et al. Immunoactive inhibin as a marker of Sertoli cell function following cytotoxic damage to the human testis. *Horm Res*. 1990;34(5-6):254-9. X-2, X-3.
2232. Tsevi I, Vicente R, Grande M, et al. KCNQ1/KCNE1 channels during germ-cell differentiation in the rat: expression associated with testis pathologies. *J Cell Physiol*. 2005 Feb;202(2):400-10. X-2, X-3.
2233. Tuerlings JH, Ligtenberg MJ, Kremer JA, et al. Screening male intracytoplasmic sperm injection candidates for mutations of the follicle stimulating hormone receptor gene. *Hum Reprod*. 1998 Aug;13(8):2098-101. X-2, X-3.
2234. Tukmen M, Temocin K, Acar C, et al. Short rib-polydactyly syndrome: A case report. *Turkish Journal of Pediatrics*. 2003 Oct;45 (4):359-362. X-2, X-3.
2235. Tung MC, Huang WJ and Chen KK. Modified subinguinal varicocelectomy for painful varicocele and varicocele-associated infertility. *J Chin Med Assoc*. 2004 Jun;67(6):296-300. X-2, X-3.
2236. Turek PJ, Ewalt DH, Snyder HM, 3rd, et al. Normal epididymal anatomy in boys. *J Urol*. 1994 Mar;151(3):726-7. X-2, X-3.

2237. Turek PJ, Ewalt DH, Snyder HM, 3rd, et al. The absent cryptorchid testis: surgical findings and their implications for diagnosis and etiology. *J Urol.* 1994 Mar;151(3):718-20; discussion 720-1. X-4, X-5, X-6.
2238. Turek PJ, Kim M, Gilbaugh JH, 3rd, et al. The clinical characteristics of 82 patients with Sertoli cell-only testis histology. *Fertil Steril.* 1995 Dec;64(6):1197-200. X-2, X-3.
2239. Turgut AT, Kosar U, Kosar P, et al. Scrotal sonographic findings in equestrians. *J Ultrasound Med.* 2005 Jul;24(7):911-7; quiz 919. X-2, X-3.
2240. Turgut AT, Olcucuoglu E, Turan C, et al. Preoperative ultrasonographic evaluation of testicular volume and blood flow in patients with inguinal hernias. *J Ultrasound Med.* 2007 Dec;26(12):1657-66; quiz 1667-9. X-2, X-3.
2241. Turgut AT, Ozden E, Unsal A, et al. A novel parameter by EFOV US for the quantification and the distinction of physiological amount of scrotal fluid and hydrocele: ratio of testis volume/scrotum volume. *Eur J Radiol.* 2007 Sep;63(3):414-9. X-2, X-3.
2242. Turgut AT, Unsal A, Ozden E, et al. Unilateral idiopathic hydrocele has a substantial effect on the ipsilateral testicular geometry and resistivity indices. *J Ultrasound Med.* 2006 Jul;25(7):837-43. X-2, X-3.
2243. Turial S, Enders J, Krause K, et al. Laparoscopic inguinal herniorrhaphy in premature infants. *Eur J Pediatr Surg.* 2010 Nov;20(6):371-4. X-2, X-3.
2244. Turial S, Enders J, Krause K, et al. Laparoscopic inguinal herniorrhaphy in babies weighing 5 kg or less. *Surg Endosc.* 2011 Jan;25(1):72-8. X-2, X-3.
2245. Turner TT. On unilateral testicular and epididymal torsion: No effect on the contralateral testis. *Journal of Urology.* 1987;138 (5):1285-1290. X-2, X-3.
2246. Turner TT. The study of varicocele through the use of animal models. *Human Reproduction Update.* 2001;7 (1):78-84. X-1, X-2, X-3.
2247. Tuttelmann F, Dykstra N, Themmen AP, et al. Anti-Mullerian hormone in men with normal and reduced sperm concentration and men with maldescended testes. *Fertil Steril.* 2009 May;91(5):1812-9. X-2, X-3.
2248. Tzvetkova P. Congenital anomalies of the mesonephric duct and fertility. *Acta Chir Iugosl.* 2007;54(2):63-7. X-2, X-3.
2249. Tzvetkova P and Tzvetkov D. Etiopathogenesis of cryptorchidism and male infertility. *Arch Androl.* 1996 Sep-Oct;37(2):117-25. X-4, X-5, X-6.
2250. Uderzo C, Grazia Zurlo M, Adamoli L, et al. Treatment of isolated testicular relapse in childhood acute lymphoblastic leukemia: an Italian multicenter study. *Associazione Italiana Ematologia ed Oncologia Pediatrica. J Clin Oncol.* 1990 Apr;8(4):672-7. X-2, X-3.
2251. Uemura S, Woodward AA, Amerena R, et al. Early repair of inguinal hernia in premature babies. *Pediatr Surg Int.* 1999;15(1):36-9. X-2, X-3.
2252. Ul Haq I, Ali G, Haq I, et al. Morbidity of mesh repair in inguinal hernias. *Medical Forum Monthly.* 2009 August;20 (8):43-46. X-2, X-3.
2253. Ul Hasan N. Management of inguinal hernia of childhood as practiced in Karachi, Pakistan. *Pediatric Surgery International.* 1993;8 (6):462-463. X-1, X-2, X-3.
2254. Ulbright TM, Amin MB and Young RH. Intratubular large cell hyalinizing Sertoli cell neoplasia of the testis: A report of 8 cases of a distinctive lesion of the Peutz-Jeghers syndrome. *American Journal of Surgical Pathology.* 2007 Jun;31 (6):827-835. X-2, X-3.
2255. Ulbright TM, Roth LM, Stehman FB, et al. Poorly differentiated (small cell) carcinoma of the ovary in young women: evidence supporting a germ cell origin. *Hum Pathol.* 1987 Feb;18(2):175-84. X-2, X-3.
2256. Ulbright TM and Young RH. Metastatic carcinoma to the testis: a clinicopathologic analysis of 26 nonincidental cases with emphasis on deceptive features. *Am J Surg Pathol.* 2008 Nov;32(11):1683-93. X-2, X-3.
2257. Ulusu NN, Tandogan B and Tanyel FC. Sarco(endo)plasmic reticulum and plasmalemmal Ca(2+)-ATPase activities in cremaster muscles and sacs differ according to the associated inguinal pathology. *Cell Biochem Funct.* 2007 Sep-Oct;25(5):515-9. X-3.
2258. Upadhyay V, Hammodat HM and Pease PW. Post circumcision meatal stenosis: 12 years' experience. *N Z Med J.* 1998 Feb 27;111(1060):57-8. X-2, X-3.
2259. Upadhyay V, Kothari M and Manoharan M. The referral pattern for undescended testes in Auckland. *N Z Med J.* 2001 Jul 13;114(1135):310-1. X-3, X-4, X-5, X-6.
2260. Upton J, Schuster SR, Colodny AH, et al. Testicular autotransplantation in children. *Am J Surg.* 1983 Apr;145(4):514-9. X-3, X-4, X-5, X-6.
2261. Urman B, Ata B, Yakin K, et al. Luteal phase empirical low molecular weight heparin administration in patients with failed ICSI embryo transfer cycles: A randomized open-labeled pilot trial. *Human Reproduction.* 2009 July;24 (7):1640-1647. X-2, X-3.
2262. Urry RL, Carrell DT, Starr NT, et al. The incidence of antisperm antibodies in infertility patients with a history of cryptorchidism. *J Urol.* 1994 Feb;151(2):381-3. X-3, X-4, X-5, X-6.
2263. Utine GE, Alanay Y, Aktas D, et al. Kabuki syndrome and trisomy 10p. *Genetic Counseling.* 2008;19 (3):291-300. X-2, X-3.

2264. Uygur MC, Arik AI, Erol D, et al. Quantitative evaluation of biopsy gun testis needle biopsy. Correlation between biopsy score of varicocele-bearing testis and sperm count. *J Reprod Med*. 1999 May;44(5):445-9. X-2, X-3.
2265. Valenti G, Baldassarre E, Testa A, et al. Dynamic self-regulating prosthesis (protesi autoregolantesi dinamica): the long-term results in the treatment of primary inguinal hernias. *Am Surg*. 2006 Mar;72(3):244-8. X-2, X-3.
2266. Valenti G, Banchini A, Zavaroni D, et al. Pituitary-thyroid axis after bilateral orchiectomy in men. *Arch Androl*. 1982 Sep;9(2):171-4. X-2, X-3.
2267. van Basten JP, Hoekstra HJ, van Driel MF, et al. Cisplatin-based chemotherapy changes the incidence of bilateral testicular cancer. *Ann Surg Oncol*. 1997 Jun;4(4):342-8. X-2, X-3.
2268. van Basten JP, van Driel MF, Jonker-Pool G, et al. Sexual functioning in testosterone-supplemented patients treated for bilateral testicular cancer. *Br J Urol*. 1997 Mar;79(3):461-7. X-2, X-3.
2269. Van Bon BWM, Koolen DA, Brueton L, et al. The 2q23.1 microdeletion syndrome: Clinical and behavioural phenotype. *European Journal of Human Genetics*. 2010 February;18 (2):163-170. X-3.
2270. van Casteren NJ, Stoop H, Dohle GR, et al. Noninvasive detection of testicular carcinoma in situ in semen using OCT3/4. *Eur Urol*. 2008 Jul;54(1):153-8. X-2, X-3.
2271. Van der Aa N, Rooms L, Vandeweyer G, et al. Fourteen new cases contribute to the characterization of the 7q11.23 microduplication syndrome. *European Journal of Medical Genetics*. 2009 March 2009/June;52 (2-3):94-100. X-2, X-3.
2272. van der Burgt I, Thoonen G, Roosenboom N, et al. Patterns of cognitive functioning in school-aged children with Noonan syndrome associated with variability in phenotypic expression. *J Pediatr*. 1999 Dec;135(6):707-13. X-3.
2273. van der Sluijs JW, den Hollander JC, Lequin MH, et al. Prenatal testicular torsion: diagnosis and natural course. An ultrasonographic study. *Eur Radiol*. 2004 Feb;14(2):250-5. X-2, X-3.
2274. van der Zanden LF, van Rooij IA, Feitz WF, et al. Genetics of hypospadias: are single-nucleotide polymorphisms in SRD5A2, ESR1, ESR2, and ATF3 really associated with the malformation? *J Clin Endocrinol Metab*. 2010 May;95(5):2384-90. X-2, X-3.
2275. Van Dop C, Burstein S, Conte FA, et al. Isolated gonadotropin deficiency in boys: clinical characteristics and growth. *J Pediatr*. 1987 Nov;111(5):684-92. X-3.
2276. Van Landuyt L, Lissens W, Stouffs K, et al. Validation of a simple Yq deletion screening programme in an ICSI candidate population. *Mol Hum Reprod*. 2000 Apr;6(4):291-7. X-2, X-3.
2277. Van Savage JG. Avoidance of inguinal incision in laparoscopically confirmed vanishing testis syndrome. *J Urol*. 2001 Oct;166(4):1421-4. X-3, X-4, X-5, X-6.
2278. Van Wallegghem J and Muller W. Seven cases of testicular tumors with two cryptorchidism. *Acta Chir Belg*. 1980 May-Jun;79(3):211-8. X-3.
2279. Vanzulli A, DelMaschio A, Paesano P, et al. Testicular masses in association with adrenogenital syndrome: US findings. *Radiology*. 1992 May;183(2):425-9. X-2, X-3.
2280. Vaos G, Zavras N and Boukouvalea I. Ectopic adrenocortical tissue along the inguinoscrotal path of children. *Int Surg*. 2006 May-Jun;91(3):125-8. X-2, X-3.
2281. Varela-Cives R, Bautista-Casasnovas A, Taboada-Santomil P, et al. Relevance of herniography for accurate diagnosis of patent processus vaginalis in cryptorchidism. *Int Braz J Urol*. 2008 Jan-Feb;34(1):57-62. X-3.
2282. Varlet F and Becmeur F. Laparoscopic treatment of varicoceles in children. Multicentric prospective study of 90 cases. *Eur J Pediatr Surg*. 2001 Dec;11(6):399-403. X-2, X-3.
2283. Vasudevan G, Manivarmane, Bhat BV, et al. Genital standards for south Indian male newborns. *Indian J Pediatr*. 1995 Sep-Oct;62(5):593-6. X-2, X-3.
2284. Vaysse P. Laparoscopy and impalpable testis--a prospective multicentric study (232 cases). *GECI. Groupe d'Etude en Coeliochirurgie Infantile. Eur J Pediatr Surg*. 1994 Dec;4(6):329-32. X-4, X-5, X-6.
2285. Vegni-Talluri M, Bigliardi E, Vanni MG, et al. Testicular microliths: their origin and structure. *J Urol*. 1980 Jul;124(1):105-7. X-3.
2286. Venara M, Rey R, Bergada I, et al. Sertoli cell proliferations of the infantile testis: an intratubular form of Sertoli cell tumor? *Am J Surg Pathol*. 2001 Oct;25(10):1237-44. X-2, X-3.
2287. Venkatachala S, Malur PR, Nerli RB, et al. Testicular biopsies--histomorphologic patterns in male infertility. *Indian J Pathol Microbiol*. 2007 Oct;50(4):726-9. X-2, X-3.
2288. Venugopal S. Inguinal hernia in children. *West Indian Med J*. 1993 Mar;42(1):24-6. X-2, X-3.
2289. Verdorfer I, Hollrigl A, Strasser U, et al. Molecular-cytogenetic characterisation of sex cord-stromal tumours: CGH analysis in sertoli cell tumours of the testis. *Virchows Arch*. 2007 Apr;450(4):425-31. X-2, X-3.
2290. Verdyck P, Holder-Espinasse M, Hul WV, et al. Clinical and molecular analysis of nine families with Adams-Oliver syndrome. *Eur J Hum Genet*. 2003 Jun;11(6):457-63. X-2, X-3.
2291. Verghese ST, Hannallah RS, Rice LJ, et al. Caudal anesthesia in children: effect of volume versus concentration of bupivacaine on blocking spermatic cord traction response during orchidopexy. *Anesth Analg*. 2002 Nov;95(5):1219-23, table of contents. X-3, X-4, X-5, X-6.
2292. Vermeulen A, Schelfhout W and De Sy W. Plasma androgen levels after subcapsular orchiectomy or estrogen treatment for prostatic carcinoma. *Prostate*. 1982;3(2):115-21. X-2, X-3.

2293. Vermouth NT, Carriazo CS, Gallara RV, et al. Maternal coordination of the daily rhythm of malate dehydrogenase activity in testes from young rats: effect of maternal sympathetic denervation of the pineal gland and administration of melatonin. *Chronobiol Int.* 1995 Feb;12(1):8-18. X-2, X-3.
2294. Vernaeve V, Krikilion A, Verheyen G, et al. Outcome of testicular sperm recovery and ICSI in patients with non-obstructive azoospermia with a history of orchidopexy. *Hum Reprod.* 2004 Oct;19(10):2307-12. X-2, X-3.
2295. Versiani BR, Trarbach E, Koenigkam-Santos M, et al. Clinical assessment and molecular analysis of GnRHR and KAL1 genes in males with idiopathic hypogonadotropic hypogonadism. *Clin Endocrinol (Oxf).* 2007 Feb;66(2):173-9. X-2, X-3.
2296. Vicentini FC, Denes FT, Gomes CM, et al. Urogenital involvement in the Klippel-Trenaunay-Weber syndrome. Treatment options and results. *Int Braz J Urol.* 2006 Nov-Dec;32(6):697-703; discussion 703-4. X-2, X-3.
2297. Vickers MA, Jr., Lamontagne DP, Guru KA, et al. Autologous tunica vaginalis and subcapsular orchiectomy: a hormonal therapy for prostate cancer. *J Androl.* 2004 May-Jun;25(3):375-81. X-2, X-3.
2298. Vignozzi L, Filippi S, Morelli A, et al. Cavernous neurotomy in the rat is associated with the onset of an overt condition of hypogonadism. *J Sex Med.* 2009 May;6(5):1270-83. X-2, X-3.
2299. Viguera RM, Moreno-Mendoza N, Reyes G, et al. Androgen receptor and calcitonin gene-related peptide in neurons of the genitofemoral nerve during testicular descent induced with human chorionic gonadotropin. *Arch Med Res.* 2003 May-Jun;34(3):166-70. X-2, X-3.
2300. Vijjan VK, Malik VK and Agarwal PN. The role of laparoscopy in the localization and management of adult impalpable testes. *JSLs.* 2004 Jan-Mar;8(1):43-6. X-2.
2301. Vilain C, Mortier G, Van Vliet G, et al. Hartsfield holoprosencephaly-ectrodactyly syndrome in five male patients: Further delineation and review. *American Journal of Medical Genetics, Part A.* 2009 July;149(7):1476-1481. X-2, X-3.
2302. Vilain E, Jaubert F, Fellous M, et al. Pathology of 46,XY pure gonadal dysgenesis: absence of testis differentiation associated with mutations in the testis-determining factor. *Differentiation.* 1993 Jan;52(2):151-9. X-2, X-3.
2303. Vinardi S, Magro P, Manenti M, et al. Testicular function in men treated in childhood for undescended testes. *J Pediatr Surg.* 2001 Feb;36(2):385-8. X-2.
2304. Vinci G, Anjot MN, Trivin C, et al. An analysis of the genetic factors involved in testicular descent in a cohort of 14 male patients with anorchia. *J Clin Endocrinol Metab.* 2004 Dec;89(12):6282-5. X-2, X-3.
2305. Virtanen HE, Tapanainen AE, Kaleva MM, et al. Mild gestational diabetes as a risk factor for congenital cryptorchidism. *J Clin Endocrinol Metab.* 2006 Dec;91(12):4862-5. X-3.
2306. Visfeldt J, Cortes D, Thorup JM, et al. Anti-MIC2 as a tool in examination of testicular biopsies. *APMIS.* 1999 Jul;107(7):631-5. X-3, X-4, X-5, X-6.
2307. Visser HK. Associated anomalies in undescended testes. *Eur J Pediatr.* 1982 Dec;139(4):272-4. X-3.
2308. Viswaroop BS, Kekre N and Gopalakrishnan G. Isolated tuberculous epididymitis: a review of forty cases. *J Postgrad Med.* 2005 Apr-Jun;51(2):109-11, discussion 111. X-2, X-3.
2309. Viville S, Warter S, Meyer JM, et al. Histological and genetic analysis and risk assessment for chromosomal aberration after ICSI for patients presenting with CBAVD. *Hum Reprod.* 2000 Jul;15(7):1613-8. X-2, X-3.
2310. Vogels A, Moerman P, Frijns JP, et al. Testicular histology in boys with Prader-Willi syndrome: fertile or infertile? *J Urol.* 2008 Oct;180(4 Suppl):1800-4. X-3, X-4, X-5, X-6.
2311. Vogels HD, Buijnen CJ and Beasley SW. Establishing benchmarks for the outcome of herniotomy in children. *Br J Surg.* 2010 Jul;97(7):1135-9. X-2, X-3.
2312. Vogt-Moykopf I, Bulzebruck H, Merkle NM, et al. Results of surgical treatment of pulmonary metastases. *Eur J Cardiothorac Surg.* 1988;2(4):224-32. X-3.
2313. Vogt-Moykopf I, Meyer G, Merkle NM, et al. Late results of surgical treatment of pulmonary metastases. *Thorac Cardiovasc Surg.* 1986 Nov;34 Spec No 2:143-8. X-3.
2314. von der Maase H, Giwercman A, Muller J, et al. Management of carcinoma-in-situ of the testis. *Int J Androl.* 1987 Feb;10(1):209-20. X-3.
2315. von der Maase H, Rorth M, Walbom-Jorgensen S, et al. Carcinoma in situ of contralateral testis in patients with testicular germ cell cancer: study of 27 cases in 500 patients. *Br Med J (Clin Res Ed).* 1986 Nov 29;293(6559):1398-401. X-3.
2316. von Eckardstein S, Simoni M, Bergmann M, et al. Serum inhibin B in combination with serum follicle-stimulating hormone (FSH) is a more sensitive marker than serum FSH alone for impaired spermatogenesis in men, but cannot predict the presence of sperm in testicular tissue samples. *J Clin Endocrinol Metab.* 1999 Jul;84(7):2496-501. X-2, X-3.
2317. von Eyben FE, Skude G and Krabbe S. Serum lactate dehydrogenase and its isoenzymes in men with maldescended testes. *J Urol.* 1982 Dec;128(6):1195-7. X-2, X-3.
2318. von Krogh J, Lien HH, Ous S, et al. Alterations in the CT image following retroperitoneal lymphadenectomy in early stage non-seminomatous testicular tumor. *Acta Radiol Diagn (Stockh).* 1985 Mar-Apr;26(2):187-91. X-3.
2319. Vugrin D and Whitmore WF, Jr. The role of chemotherapy and surgery in the treatment of retroperitoneal metastases in advanced nonseminomatous testis cancer. *Cancer.* 1985 May 1;55(9):1874-8. X-2, X-3.

2320. Vugrin D, Whitmore WF, Jr. and Golbey RB. VAB-5 combination chemotherapy in prognostically poor risk patients with germ cell tumors. *Cancer*. 1983 Mar 15;51(6):1072-5. X-2, X-3.
2321. Vydra G, Magasi P and Rozsahegyi J. Ultrastructural investigations of undescended testicles. *Acta Chir Hung*. 1984;25(2):75-86. X-3.
2322. Wacksman J, Billmire DA, Lewis AG, et al. Laparoscopically assisted testicular autotransplantation for management of the intraabdominal undescended testis. *J Urol*. 1996 Aug;156(2 Pt 2):772-4. X-4, X-5, X-6.
2323. Wacksman J, Dinner M and Staffon RA. Technique of testicular autotransplantation using a microvascular anastomosis. *Surg Gynecol Obstet*. 1980 Mar;150(3):399-400. X-4, X-5, X-6.
2324. Wakhlu A, Dalela D, Tandon RK, et al. The single ectopic ureter. *Br J Urol*. 1998 Aug;82(2):246-51. X-2, X-3.
2325. Walcott FL, Hauptmann M, Duphorne CM, et al. A case-control study of dietary phytoestrogens and testicular cancer risk. *Nutr Cancer*. 2002;44(1):44-51. X-2, X-3.
2326. Waldschmidt J and Schier F. Laparoscopic surgery in neonates and infants. *Eur J Pediatr Surg*. 1991 Jun;1(3):145-50. X-3, X-4, X-5, X-6.
2327. Walker BR, Skoog SJ, Winslow BH, et al. Testis sparing surgery for steroid unresponsive testicular tumors of the adrenogenital syndrome. *J Urol*. 1997 Apr;157(4):1460-3. X-3.
2328. Wallace DM, Gunter PA, Landon GV, et al. Sympathetic orchioepithia--an experimental and clinical study. *Br J Urol*. 1982 Dec;54(6):765-8. X-3.
2329. Walschaerts M, Muller A, Auger J, et al. Environmental, occupational and familial risks for testicular cancer: a hospital-based case-control study. *Int J Androl*. 2007 Aug;30(4):222-9. X-2, X-3.
2330. Walsh TJ, Wu AK, Croughan MS, et al. Differences in the clinical characteristics of primarily and secondarily infertile men with varicocele. *Fertil Steril*. 2009 Mar;91(3):826-30. X-2, X-3.
2331. Wan J, Corvino TF, Greenfield SP, et al. The incidence of recreational genitourinary and abdominal injuries in the Western New York pediatric population. *J Urol*. 2003 Oct;170(4 Pt 2):1525-7; discussion 1527. X-2, X-3.
2332. Wanderas EH, Fossa SD, Heilo A, et al. Serum follicle stimulating hormone--predictor of cancer in the remaining testis in patients with unilateral testicular cancer. *Br J Urol*. 1990 Sep;66(3):315-7. X-3.
2333. Wandless JG. A comparison of nalbuphine with morphine for post-orchidopexy pain. *Eur J Anaesthesiol*. 1987 Mar;4(2):127-32. X-3, X-4, X-5, X-6.
2334. Wang KS and Shaul DB. Two-stage laparoscopic orchidopexy with gubernacular preservation: Preliminary report of a new approach to the intra-abdominal testis. *Pediatric Endosurgery and Innovative Techniques*. 2004 Sep;8 (3):250-253. X-4, X-5, X-6.
2335. Wang WJ, Yeh YA, Stout P, et al. Inverse relationship between Leydig cell density and metastatic potential of prostatic adenocarcinoma. *Anal Cell Pathol*. 1999;19(3-4):169-73. X-2, X-3.
2336. Wang Y, Barthold J, Figueroa E, et al. Analysis of five single nucleotide polymorphisms in the ESR1 gene in cryptorchidism. *Birth Defects Res A Clin Mol Teratol*. 2008 Jun;82(6):482-5. X-3.
2337. Wang YX, Lei C, Dong SG, et al. Study of bilateral histology and meiotic analysis in men undergoing varicocele ligation. *Fertil Steril*. 1991 Jan;55(1):152-5. X-2, X-3.
2338. Ward JF, Cilento BG, Jr., Kaplan GW, et al. The ultrasonic description of postpubertal testicles in men who have undergone prepubertal orchidopexy for cryptorchidism. *J Urol*. 2000 May;163(5):1448-50. X-2, X-3.
2339. Wasniewska M, Matarazzo P, Weber G, et al. Clinical presentation of McCune-Albright syndrome in males. *J Pediatr Endocrinol Metab*. 2006 May;19 Suppl 2:619-22. X-2, X-3.
2340. Watanabe M, Kashiwakura Y, Kusumi N, et al. Adeno-associated virus-mediated human IL-10 gene transfer suppresses the development of experimental autoimmune orchitis. *Gene Ther*. 2005 Jul;12(14):1126-32. X-2, X-3.
2341. Waters WB, Garnick MB and Richie JP. Complications of retroperitoneal lymphadenectomy in the management of nonseminomatous tumors of the testis. *Surg Gynecol Obstet*. 1982 Apr;154(4):501-4. X-2, X-3.
2342. Watkin NA, Reiger NA and Moisey CU. Is the conservative management of the acute scrotum justified on clinical grounds? *British Journal of Urology*. 1996;78 (4):623-627. X-2, X-3.
2343. Waxman S, Beekley A, Morey A, et al. Penetrating trauma to the external genitalia in Operation Iraqi Freedom. *Int J Impot Res*. 2009 Mar-Apr;21(2):145-8. X-2, X-3.
2344. Weingarten BJ, Kellman GM, Middleton WD, et al. Tubular ectasia within the mediastinum testis. *J Ultrasound Med*. 1992 Jul;11(7):349-53. X-3.
2345. Weir HK, Marrett LD, Kreiger N, et al. Pre-natal and peri-natal exposures and risk of testicular germ-cell cancer. *Int J Cancer*. 2000 Aug 1;87(3):438-43. X-2, X-3.
2346. Weisberger EC and McBride LC. Modified neck dissection for metastatic nonseminomatous testicular carcinoma. *Laryngoscope*. 1999 Aug;109(8):1241-4. X-3.
2347. Weiske WH, Salzler N, Schroeder-Printzen I, et al. Clinical findings in congenital absence of the vasa deferentia. *Andrologia*. 2000 Jan;32(1):13-8. X-3.
2348. Weiss RM and Seashore JH. Laparoscopy in the management of the nonpalpable testis. *J Urol*. 1987 Aug;138(2):382-4. X-4, X-5, X-6.
2349. Welch VW. The management of urologic disorders in the neonate. *J Perinat Neonatal Nurs*. 1994 Jun;8(1):48-58. X-3, X-4, X-5, X-6.

2350. Welvaart K and Tijssen JG. Management of the undescended testis in relation to the development of cancer. *J Surg Oncol.* 1981;17(3):219-23. X-3.
2351. Wennstrom B and Bergh I. Bodily and verbal expressions of postoperative symptoms in 3- to 6-year-old boys. *J Pediatr Nurs.* 2008 Feb;23(1):65-76. X-3.
2352. Wenzler DL, Bloom DA and Park JM. What is the rate of spontaneous testicular descent in infants with cryptorchidism? *J Urol.* 2004 Feb;171(2 Pt 1):849-51. X-3.
2353. West AF, Leung HY and Powell PH. Epididymectomy is an effective treatment for scrotal pain after vasectomy. *BJU Int.* 2000 Jun;85(9):1097-9. X-3.
2354. Westermann DH, Schefer H, Thalmann GN, et al. Long-term followup results of 1 cycle of adjuvant bleomycin, etoposide and cisplatin chemotherapy for high risk clinical stage I nonseminomatous germ cell tumors of the testis. *J Urol.* 2008 Jan;179(1):163-6. X-3.
2355. Wheatley JK, Bergman WA, Green B, et al. Transvenous occlusion of clinical and subclinical varicoceles. *Urology.* 1991 Apr;37(4):362-5. X-2, X-3.
2356. Wheeler M, Peakman D, Robinson A, et al. 45,X/46,XY mosaicism: contrast of prenatal and postnatal diagnosis. *Am J Med Genet.* 1988 Mar;29(3):565-71. X-3.
2357. Wheeler PG, Quigley CA, Sadeghi-Nejad A, et al. Hypogonadism and CHARGE association. *American Journal of Medical Genetics.* 2000 18 Sep;94 (3):228-231. X-2, X-3.
2358. Whitaker P and De Kock ML. Laparoscopy for the non-palpable testis--look before you cut! *S Afr J Surg.* 1992 Mar;30(1):26-8. X-4, X-5, X-6.
2359. White BJ, Rogol AD and Brown KS. The syndrome of anosmia with hypogonadotropic hypogonadism: A genetic study of 18 new families and a review. *American Journal of Medical Genetics.* 1983;15 (3):417-435. X-2, X-3.
2360. Wiener JS, Marcelli M, Gonzales ET, Jr., et al. Androgen receptor gene alterations are not associated with isolated cryptorchidism. *J Urol.* 1998 Sep;160(3 Pt 1):863-5. X-3, X-4, X-5, X-6.
2361. Wikramanayake E. Testicular size in young adult Sinhalese. *Int J Androl.* 1995 Jun;18 Suppl 1:29-31. X-2, X-3.
2362. Wilkerson ML, Bartone FF, Fox L, et al. Fertility potential: a comparison of intra-abdominal and intracanalicular testes by age groups in children. *Horm Res.* 2001;55(1):18-20. X-3.
2363. Willan BD and McGowan DG. Seminoma of the testis: a 22-year experience with radiation therapy. *Int J Radiat Oncol Biol Phys.* 1985 Oct;11(10):1769-75. X-2, X-3.
2364. Willemse PH, Sleijfer DT, Schraffordt Koops H, et al. Leydig cell function in patients with testicular cancer during and after chemotherapy. *Int J Androl.* 1983 Dec;6(6):497-508. X-3.
2365. Willemse PH, Sleijfer DT, Sluiter WJ, et al. Altered Leydig cell function in patients with testicular cancer: evidence for bilateral testicular defect. *Acta Endocrinol (Copenh).* 1983 Apr;102(4):616-24. X-2, X-3.
2366. Willemse PM, Hamdy NA, van Wulften L, et al. Prevalence of vertebral fractures independent of BMD and anticancer treatment in patients with testicular germ cell tumors. *J Clin Endocrinol Metab.* 2010 Nov;95(11):4933-42. X-3.
2367. Williams EV, Appanna T and Foster ME. Management of the impalpable testis: a six year review together with a national experience. *Postgrad Med J.* 2001 May;77(907):320-2. X-3, X-4, X-5, X-6.
2368. Williamson RC and Thomas WE. Sympathetic orchidopathia. *Ann R Coll Surg Engl.* 1984 Jul;66(4):264-6. X-3.
2369. Willschke H, Marhofer P, Bosenberg A, et al. Ultrasonography for ilioinguinal/iliohypogastric nerve blocks in children. *Br J Anaesth.* 2005 Aug;95(2):226-30. X-3, X-4, X-5, X-6.
2370. Winquist EW, Bauman GS and Balogh J. Nontraumatic osteonecrosis after chemotherapy for testicular cancer: A systematic review. *American Journal of Clinical Oncology: Cancer Clinical Trials.* 2001;24 (6):603-606. X-2, X-3.
2371. Winters SJ and Troen P. A reexamination of pulsatile luteinizing hormone secretion in primary testicular failure. *J Clin Endocrinol Metab.* 1983 Aug;57(2):432-5. X-2, X-3.
2372. Wisanuyotin S, Dell KM, Vogt BA, et al. Complications of peritoneal dialysis in children with Eagle-Barrett syndrome. *Pediatr Nephrol.* 2003 Feb;18(2):159-63. X-2, X-3.
2373. Wiser A, Raviv G, Weissenberg R, et al. Does age at orchidopexy impact on the results of testicular sperm extraction? *Reprod Biomed Online.* 2009 Dec;19(6):778-83. X-2.
2374. Wisser J, Kurmanavicius J, Lauper U, et al. Successful treatment of fetal megavesica in the first half of pregnancy. *Am J Obstet Gynecol.* 1997 Sep;177(3):685-9. X-2, X-3.
2375. Witt MA, Heron S and Lipshultz LI. The post-vasectomy length of the testicular vasal remnant: a predictor of surgical outcome in microscopic vasectomy reversal. *J Urol.* 1994 Apr;151(4):892-4. X-3.
2376. Wobbes T, Eibergen R, Oldhoff J, et al. Results of retroperitoneal lymph node dissection and postoperative adjuvant chemotherapy with dactinomycin in the treatment of retroperitoneal metastases of nonseminomatous testicular germ cell tumors. *Cancer.* 1983 Mar 15;51(6):1076-9. X-3.
2377. Wobbes T, Schraffordt Koops H and Oldhoff J. The relation between testicular tumours, undescended testes, and inguinal hernias. *J Surg Oncol.* 1980;14(1):45-51. X-3.
2378. Wobbes T, Schraffordt Koops H and Oldhoff J. Results of treatment of non-seminomatous tumours of the testis in pathological stage I. *Netherlands Journal of Surgery.* 1983;35 (3):89-93. X-2, X-3.

2379. Wofford MM, Smith SD, Shuster JJ, et al. Treatment of occult or late overt testicular relapse in children with acute lymphoblastic leukemia: a Pediatric Oncology Group study. *J Clin Oncol*. 1992 Apr;10(4):624-30. X-3.
2380. Wohlfahrt-Veje C, Boisen KA, Boas M, et al. Acquired cryptorchidism is frequent in infancy and childhood. *Int J Androl*. 2009 Aug;32(4):423-8. X-3.
2381. Woldu SL, Van Batavia JP, Poon SA, et al. Is adolescent varicocelectomy safe after previous inguinal surgery? *J Urol*. 2010 Oct;184(4 Suppl):1716-21. X-3.
2382. Wolf AR, Hughes D, Wade A, et al. Postoperative analgesia after paediatric orchidopexy: evaluation of a bupivacaine-morphine mixture. *Br J Anaesth*. 1990 Apr;64(4):430-5. X-3, X-4, X-5, X-6.
2383. Wolf SA and Hopkins JW. Laparoscopic incidence of contralateral patent processus vaginalis in boys with clinical unilateral inguinal hernias. *J Pediatr Surg*. 1994 Aug;29(8):1118-20; discussion 1120-1. X-3.
2384. Wolloch Y, Shahar E, Shachter A, et al. Fertility and sexual development after bilateral orchiopexy for cryptorchidism. *Isr J Med Sci*. 1980 Sep-Oct;16(9-10):707-10. X-4, X-5, X-6.
2385. Wong HB and Chua TS. Aspects of male hypogonadism. *Journal of the Singapore Paediatric Society*. 1985;27(1-2):47-60. X-1, X-2, X-3.
2386. Wood S, Vang E, Manning J, et al. The ratio of second to fourth digit length in azoospermic males undergoing surgical sperm retrieval: predictive value for sperm retrieval and on subsequent fertilization and pregnancy rates in IVF/ICSI cycles. *J Androl*. 2003 Nov-Dec;24(6):871-7. X-2, X-3.
2387. Wood S, Vang E, Troup S, et al. Surgical sperm retrieval after previous vasectomy and failed reversal: clinical implications for in vitro fertilization. *BJU Int*. 2002 Aug;90(3):277-81. X-2, X-3.
2388. Woodhouse CR. Prospects for fertility in patients born with genitourinary anomalies. *J Urol*. 2001 Jun;165(6 Pt 2):2354-60. X-3, X-4, X-5, X-6.
2389. Woodhouse CR, Ransley PG and Innes-Williams D. Prune belly syndrome--report of 47 cases. *Arch Dis Child*. 1982 Nov;57(11):856-9. X-3.
2390. Woodhouse CR and Snyder HM, 3rd. Testicular and sexual function in adults with prune belly syndrome. *J Urol*. 1985 Apr;133(4):607-9. X-3, X-4, X-5, X-6.
2391. Woodhouse J and Ferguson MM. Multiple hyperechoic testicular lesions are a common finding on ultrasound in Cowden disease and represent lipomatosis of the testis. *Br J Radiol*. 2006 Oct;79(946):801-3. X-2, X-3.
2392. Woodhouse JB, Delahunt B, English SF, et al. Testicular lipomatosis in Cowden's syndrome. *Mod Pathol*. 2005 Sep;18(9):1151-6. X-2, X-3.
2393. Worischek JH and Parra RO. Transrectal ultrasound in the evaluation of men with low volume azoospermia. *J Urol*. 1993 May;149(5 Pt 2):1341-4. X-2, X-3.
2394. Wright EJ, Young GP and Goldstein M. Reduction in testicular temperature after varicocelectomy in infertile men. *Urology*. 1997 Aug;50(2):257-9. X-2, X-3.
2395. Wu AK, Walsh TJ, Phonsombat S, et al. Bilateral but not unilateral testicular hypotrophy predicts for severe impairment of semen quality in men with varicocele undergoing infertility evaluation. *Urology*. 2008 Jun;71(6):1114-8. X-2, X-3.
2396. Wu HY, Rusnack SL, Bellah RD, et al. Genitourinary malformations in chromosome 22q11.2 deletion. *J Urol*. 2002 Dec;168(6):2564-5. X-3.
2397. Wu WH, Chuang JH, Ting YC, et al. Developmental anomalies and disabilities associated with hypospadias. *J Urol*. 2002 Jul;168(1):229-32. X-2, X-3.
2398. Wuernschimmel E, Lipsky H and Noest G. Laparoscopic varicocele ligation: a recommendable standard procedure with good long-term results. *Eur Urol*. 1995;27(1):18-22. X-3.
2399. Wyllie GC. The retractile testis. *Medical Journal of Australia*. 1984;140(7):403-405. X-3.
2400. Wyns C, Curaba M, Martinez-Madrid B, et al. Spermatogonial survival after cryopreservation and short-term orthotopic immature human cryptorchid testicular tissue grafting to immunodeficient mice. *Hum Reprod*. 2007 Jun;22(6):1603-11. X-3.
2401. Wysowski DK. Use of fertility drugs in the United States, 1973 through 1991. *Fertil Steril*. 1993 Dec;60(6):1096-8. X-2, X-3.
2402. Yagan N. Testicular US findings after biopsy. *Radiology*. 2000 Jun;215(3):768-73. X-3.
2403. Yakirevich E, Yanai O, Sova Y, et al. Cytotoxic phenotype of intra-epithelial lymphocytes in normal and cryptorchid human testicular excurrent ducts. *Hum Reprod*. 2002 Feb;17(2):275-83. X-3.
2404. Yalcin B, Komesli GH, Ozgok Y, et al. Vascular anatomy of normal and undescended testes: surgical assessment of anastomotic channels between testicular and deferential arteries. *Urology*. 2005 Oct;66(4):854-7. X-2, X-3.
2405. Yamaguchi M, Sakatoku J and Takihara H. The application of intrascrotal deep body temperature measurement for the noninvasive diagnosis of varicoceles. *Fertil Steril*. 1989 Aug;52(2):295-301. X-2, X-3.
2406. Yamamoto M, Hibi H, Katsuno S, et al. Management of chronic orchialgia of unknown etiology. *Int J Urol*. 1995 Mar;2(1):47-9. X-2, X-3.
2407. Yamamoto M, Katsuno S, Yokoi K, et al. The effect of varicocelectomy on testicular volume in infertile patients with varicoceles. *Nagoya J Med Sci*. 1995 Mar;58(1-2):47-50. X-2, X-3.
2408. Yamamoto M, Tsuji Y, Ohmura M, et al. Comparison of artery-ligating and artery-preserving varicocelectomy: effect on post-operative spermatogenesis. *Andrologia*. 1995 Jan-Feb;27(1):37-40. X-2, X-3.

2409. Yaman, Soygur T, Yilmaz E, et al. The significance of testicular reactive oxygen species on testicular histology in infertile patients. *Int Urol Nephrol*. 1999;31(3):395-9. X-2, X-3.
2410. Yaman A, Saatci P, Arikan G, et al. Ocular findings in children with nonsyndromic cleft lip and palate. *Turk J Pediatr*. 2009 Jul-Aug;51(4):350-3. X-2, X-3.
2411. Yamanaka J, Baker M, Metcalfe S, et al. Serum levels of Mullerian inhibiting substance in boys with cryptorchidism. *J Pediatr Surg*. 1991 May;26(5):621-3. X-3.
2412. Yamazaki Y, Suzuki M, Shiroyanagi Y, et al. Scrotal nubbins associated with blind-ending spermatic vessels and a normal vas deferens on laparoscopy. *Int J Urol*. 2009 Nov;16(11):902-4. X-3, X-4, X-5, X-6.
2413. Yan J, Huang G, Sun Y, et al. Birth defects after assisted reproductive technologies in China: Analysis of 15,405 offspring in seven centers (2004 to 2008). *Fertility and Sterility*. 2011 January;95 (1):458-460. X-3.
2414. Yang C, Liu X and Wei GH. Foreskin development in 10 421 Chinese boys aged 0-18 years. *World J Pediatr*. 2009 Nov;5(4):312-5. X-2, X-3.
2415. Yang G, Walsh TJ, Shefi S, et al. The kinetics of the return of motile sperm to the ejaculate after vasectomy reversal. *J Urol*. 2007 Jun;177(6):2272-6. X-2, X-3.
2416. Yang GS, Lu RK and Chen ZD. Clinical significance of EGF and EGFR expression changes in cryptorchid boys. *Asian J Androl*. 2002 Dec;4(4):255-8. X-3, X-4, X-5, X-6.
2417. Yang RJ, Sheu JJ, Chen HS, et al. Morbidity at elementary school entry differs by sex and level of residence urbanization: A comparative cross-sectional study. *BMC Public Health*. 2007;7(358). X-2, X-3.
2418. Yang W, Ding J, Jin X, et al. The plication and splinting procedure for idiopathic sclerosing encapsulating peritonitis. *J Invest Surg*. 2009 Jul-Aug;22(4):286-91. X-2, X-3.
2419. Yanke BV and Horowitz M. Safety of the Veress needle in pediatric laparoscopy. *J Endourol*. 2007 Jul;21(7):695-7. X-3, X-4, X-5, X-6.
2420. Yeboah ED, Wadhvani JM and Wilson JB. Etiological factors of male infertility in Africa. *Int J Fertil*. 1992 Sep-Oct;37(5):300-7. X-2, X-3.
2421. Yeniyoil CO, Sorguc S, Minareci S, et al. Role of interferon-alpha-2B in prevention of testicular atrophy with unilateral mumps orchitis. *Urology*. 2000 Jun;55(6):931-3. X-2, X-3.
2422. Yetkin MA, Erdinc FS, Bulut C, et al. Epididymoorchitis due to brucellosis in central Anatolia, Turkey. *Urol Int*. 2005;75(3):235-8. X-2, X-3.
2423. Yeung L, Palmer D, Holland D, et al. *Journal of Endourology*. [Conference Abstract]. 2009 01 Jun;Conference: 24th Annual Meeting of the Engineering and Urology Society Chicago, IL United States. Conference Start: 20090425 Conference End: 20090425. Conference: 24th Annual Meeting of the Engineering and Urology Society Chicago, IL United States. Conference Start: 20090425 Conference End: 20090425. Conference Publication: (var.pagings). 23 (6):1032-1033. X-2, X-3.
2424. Yeung YP, Cheng MS, Ho KL, et al. Day-case inguinal herniotomy in Chinese children: retrospective study. *Hong Kong Med J*. 2002 Aug;8(4):245-8. X-3.
2425. Yikilmaz A and Lee EY. MRI findings of bilateral juvenile granulosa cell tumor of the testis in a newborn presenting as intraabdominal masses. *Pediatr Radiol*. 2007 Oct;37(10):1031-4. X-3.
2426. Yip KF, Tam PK and Li MK. Laparoscopic flip-flap hernioplasty: an innovative technique for pediatric hernia surgery. *Surg Endosc*. 2004 Jul;18(7):1126-9. X-2, X-3.
2427. Yoon DJ, Golimbu M, Schinella R, et al. Immunocytochemical localization of hFSH as an index of Sertoli cell function in the human testis. *Acta Endocrinol (Copenh)*. 1987 Nov;116(3):333-8. X-2, X-3.
2428. Yordam N, Alikasifoglu A, Kandemir N, et al. True hermaphroditism: clinical features, genetic variants and gonadal histology. *J Pediatr Endocrinol Metab*. 2001 Apr;14(4):421-7. X-3.
2429. Yoshida K, Kitahara S, Chiba K, et al. Predictive indicators of successful varicocele repair in men with infertility. *Int J Fertil Womens Med*. 2000 Jul-Aug;45(4):279-84. X-2, X-3.
2430. Yoshida T, Ohno K, Morotomi Y, et al. Clinical and pathological features of ascending testis. *Osaka City Med J*. 2009 Dec;55(2):81-7. X-3.
2431. Younes AK. Low plasma testosterone in varicocele patients with impotence and male infertility. *Arch Androl*. 2000 Nov-Dec;45(3):187-95. X-2, X-3.
2432. Younes AK. Improvement of sexual activity, pregnancy rate, and low plasma testosterone after bilateral varicolectomy in impotence and male infertility patients. *Arch Androl*. 2003 May-Jun;49(3):219-28. X-2, X-3.
2433. Young J, Couzinet B, Pholsena M, et al. Plasma 3 beta-hydroxy-delta 5-steroids in patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency. *J Clin Endocrinol Metab*. 1994 Feb;78(2):299-304. X-2, X-3.
2434. Young RH, Koelliker DD and Scully RE. Sertoli cell tumors of the testis, not otherwise specified: a clinicopathologic analysis of 60 cases. *Am J Surg Pathol*. 1998 Jun;22(6):709-21. X-2, X-3.
2435. Young RH and Scully RE. Ovarian Sertoli-Leydig cell tumors with a retiform pattern: A problem in histopathologic diagnosis. A report of 25 cases. *American Journal of Surgical Pathology*. 1983;7 (8):755-771. X-2, X-3.
2436. Youngren KK, Nadeau JH and Matin A. Testicular cancer susceptibility in the 129.MOLF-Chr19 mouse strain: additive effects, gene interactions and epigenetic modifications. *Hum Mol Genet*. 2003 Feb 15;12(4):389-98. X-2, X-3.

2437. Youssef T, Abd-Elaal E, Gaballah G, et al. Varicocelelectomy in men with nonobstructive azoospermia: is it beneficial? *Int J Surg*. 2009 Aug;7(4):356-60. X-2, X-3.
2438. Yu TJ. The character of variant persistent mullerian-duct structures. *Pediatr Surg Int*. 2002 Sep;18(5-6):455-8. X-3.
2439. Yuan X, Wei G, Lin T, et al. Uncommon pediatric painless scrotal masses: a puzzle of pediatricians and urologists. *Int Urol Nephrol*. 2010 Dec;42(4):979-84. X-3.
2440. Yuasa J, Ito H, Toyama Y, et al. Postnatal development of the testis in Japanese children based on observations of undescended testes. *Int J Urol*. 2001 Sep;8(9):490-4. X-3.
2441. Yucel S, Celik O, Kol A, et al. Initial pre-scrotal approach for palpable cryptorchid testis: results during a 3-year period. *J Urol*. 2011 Feb;185(2):669-72. X-4, X-5, X-6.
2442. Yun YJ, Lee HC, Kim JE, et al. Preliminary analysis of the G178A polymorphism of insulin-like factor 3 in male infertility. *Fertil Steril*. 2007 Dec;88(6):1706-8. X-3.
2443. Yunusov MY. Microsurgery of cryptorchidism II: Managing arterial caliber discrepancy. *Annals of Plastic Surgery*. 1993;31 (2):151-153. X-1, X-2, X-3.
2444. Yunusov MY and Kajumchodzaev AA. Microsurgery of cryptorchidism I: Lengthening the short vas deferens. *Annals of Plastic Surgery*. 1993;31 (2):149-150. X-1, X-2, X-3.
2445. Yurtcu M, Gunel E, Sahin TK, et al. Effects of fasting and preoperative feeding in children. *World Journal of Gastroenterology*. 2009;15 (39):4919-4922. X-3.
2446. Zacest AC, Magill ST, Anderson VC, et al. Long-term outcome following ilioinguinal neurectomy for chronic pain. *Journal of Neurosurgery*. 2010 April;112 (4):784-789. X-2, X-3.
2447. Zachmann M, Tassinari D and Prader A. Clinical and biochemical variability of congenital adrenal hyperplasia due to 11 beta-hydroxylase deficiency. A study of 25 patients. *J Clin Endocrinol Metab*. 1983 Feb;56(2):222-9. X-3.
2448. Zafaranloo S, Gerard PS and Wise G. Sonographic assessment of fetal male genitalia. *Journal of Diagnostic Medical Sonography*. 1991;7 (4):205-207. X-2, X-3.
2449. Zagars GK and Babaian RJ. The role of radiation in stage II testicular seminoma. *Int J Radiat Oncol Biol Phys*. 1987 Feb;13(2):163-70. X-3.
2450. Zagars GK and Babaian RJ. Stage I testicular seminoma: rationale for postorchietomy radiation therapy. *Int J Radiat Oncol Biol Phys*. 1987 Feb;13(2):155-62. X-2, X-3.
2451. Zampieri N, Mantovani A, Ottolenghi A, et al. Testicular catch-up growth after varicocelelectomy: does surgical technique make a difference? *Urology*. 2009 Feb;73(2):289-92. X-2, X-3.
2452. Zampieri N, Pellegrino M, Ottolenghi A, et al. Effects of bioflavonoids in the management of subclinical varicocele. *Pediatr Surg Int*. 2010 May;26(5):505-8. X-2, X-3.
2453. Zampieri N, Zamboni C, Ghidini A, et al. Prenatal sonographic evaluation of male genitalia development. *Minerva Ginecol*. 2008 Aug;60(4):317-21. X-2, X-3.
2454. Zampieri N, Zuin V, Burro R, et al. A prospective study in children: Pre- and post-surgery use of vitamin E in surgical incisions. *J Plast Reconstr Aesthet Surg*. 2010 Sep;63(9):1474-8. X-3.
2455. Zarrilli S, Lombardi G, Paesano L, et al. Hormonal and seminal evaluation of Leydig cell tumour patients before and after orchietomy. *Andrologia*. 2000 May;32(3):147-54. X-2, X-3.
2456. Zaupa P, Mayr J and Hollwarth ME. Antegrade scrotal sclerotherapy for treating primary varicocele in children. *BJU Int*. 2006 Apr;97(4):809-12. X-2, X-3.
2457. Zenaty D, Dijoud F, Morel Y, et al. Bilateral anorchia in infancy: occurrence of micropenis and the effect of testosterone treatment. *J Pediatr*. 2006 Nov;149(5):687-91. X-2, X-3.
2458. Zenke U, Jalalian L, Shen S, et al. The difficult MESA: findings from tubuli recti sperm aspiration. *J Assist Reprod Genet*. 2004 Feb;21(2):31-5. X-2, X-3.
2459. Zerella JT and McGill LC. Survival of nonpalpable undescended testicles after orchiopexy. *J Pediatr Surg*. 1993 Feb;28(2):251-3. X-4, X-5, X-6.
2460. Zheng YQ, Gao X, Li ZJ, et al. Efficacy of bilateral and left varicocelelectomy in infertile men with left clinical and right subclinical varicoceles: a comparative study. *Urology*. 2009 Jun;73(6):1236-40. X-2, X-3.
2461. Zhengwei Y, Wreford NG, Royce P, et al. Stereological evaluation of human spermatogenesis after suppression by testosterone treatment: heterogeneous pattern of spermatogenic impairment. *J Clin Endocrinol Metab*. 1998 Apr;83(4):1284-91. X-2, X-3.
2462. Zhuo Y, Klaen R, Sauter TW, et al. Laparoscopic retroperitoneal lymph node dissection in clinical stage I nonseminomatous germ cell tumor: a minimal invasive alternative. *Chin Med J (Engl)*. 1998 Jun;111(6):537-41. X-2, X-3.
2463. Zilberman D, Inbar Y, Heyman Z, et al. Torsion of the cryptorchid testis--can it be salvaged? *J Urol*. 2006 Jun;175(6):2287-9; discussion 2289. X-3, X-4, X-5, X-6.
2464. Zilberman D, Winkler H, Kleinmann N, et al. Testicular prosthesis insertion following testicular loss or atrophy during early childhood - Technical aspects and evaluation of patient satisfaction. *Journal of Pediatric Urology*. 2007 Dec;3 (6):461-465. X-3.
2465. Zingg EJ and Zehntner C. Bilateral testicular germ cell tumors. *Prog Clin Biol Res*. 1985;203:673-80. X-3.

2466. Zini A, Buckspan M, Berardinucci D, et al. The influence of clinical and subclinical varicocele on testicular volume. *Fertil Steril*. 1997 Oct;68(4):671-4. X-2, X-3.
2467. Zini A, Buckspan M, Berardinucci D, et al. Loss of left testicular volume in men with clinical left varicocele: correlation with grade of varicocele. *Arch Androl*. 1998 Jul-Aug;41(1):37-41. X-2, X-3.
2468. Zivkovic D and Hadziselimovic F. Development of Sertoli cells during mini-puberty in normal and cryptorchid testes. *Urol Int*. 2009;82(1):89-91. X-3, X-4, X-5, X-6.
2469. Zivkovic D, Varga J, Konstantinidis G, et al. Regional differences in maturation of germ cells of cryptorchid testes: role of environment. *Acta Paediatr*. 2009 Aug;98(8):1339-43. X-3, X-4, X-5, X-6.
2470. Zondek LH and Zondek T. Normal and abnormal development of the epididymis of the fetus and infant. *Eur J Pediatr*. 1980 Jun;134(1):39-44. X-2, X-3.
2471. Zorba UO, Sanli OM, Tezer M, et al. Effect of infertility duration on postvaricocelectomy sperm counts and pregnancy rates. *Urology*. 2009 Apr;73(4):767-71. X-2, X-3.
2472. Zorngiotti AW. Testis temperature, infertility, and the varicocele paradox. *Urology*. 1980 Jul;16(1):7-10. X-1, X-2, X-3.
2473. Zornow DH and Landes RR. Scrotal palpation. *Am Fam Physician*. 1981 Jan;23(1):150-4. X-1, X-2, X-3.
2474. Zuccarello D, Morini E, Douzgou S, et al. Preliminary data suggest that mutations in the CgRP pathway are not involved in human sporadic cryptorchidism. *J Endocrinol Invest*. 2004 Sep;27(8):760-4. X-3.
2475. Zukerberg LR, Young RH and Scully RE. Sclerosing Sertoli cell tumor of the testis. A report of 10 cases. *Am J Surg Pathol*. 1991 Sep;15(9):829-34. X-2, X-3.
2476. Zumrutbas AE, Resorlu B, Yesil M, et al. Is the presence of venous reflux really significant in the diagnosis of varicocele? *Int Urol Nephrol*. 2008;40(4):983-7. X-2, X-3.
2477. Zwierstra RP, Bleichrodt RP and Suurmeyer AJ. Undescended testes and puberty. Orchidopexia or orchiectomy. *Z Kinderchir*. 1984 Aug;39(4):255-8. X-3, X-4, X-5, X-6.

Excluded During Full Text Review

1. Boys with late descending testes: the source of patients with "retractile" testes undergoing orchidopexy? *Br Med J (Clin Res Ed)*. 1986 Sep 27;293(6550):789-90. X-5, X-6, X-7.
2. Effect of corticosteroid creams on descent of testes in infants. *John Radcliffe Hospital Cryptorchidism Study Group. BMJ*. 1990 Jul 28;301(6745):214-5. X-5, X-6, X-7.
3. Timing of elective surgery on the genitalia of male children with particular reference to the risks, benefits, and psychological effects of surgery and anesthesia. *American Academy of Pediatrics. Pediatrics*. 1996 Apr;97(4):590-4. X-1.
4. Bibliography. *Current world literature. Paediatric urology. Curr Opin Urol*. 2008 Jul;18(4):442-5. X-1.
5. Abd-Alrhman H, Abd-Alkareem A and Ibrahim Ezzat M. Ultrasound localization of undescended testicles. *Saudi Medical Journal. [Journal]*. 1984;5 (4):421-424. X-2.
6. Abyholm T, Oian P and Gordeladze JO. True cryptorchidism and retractile testes in infertile men. *Acta Eur Fertil*. 1986 Jan-Feb;17(1):15-8. X-4, X-5, X-6, X-7.
7. Adamsen S, Aronson S and Borjesson B. Prospective evaluation of human chorionic gonadotropin in the treatment of cryptorchidism. *Acta Chir Scand*. 1989 Oct;155(10):509-14. X-4, X-5, X-6, X-7.
8. Adiyaman P, Ocal G, Berberoglu M, et al. Plasma testosterone response at 1st and 4th day after short- and long-term hCG stimulation test. *Turkish Journal of Pediatrics*. 2004 Oct;46 (4):309-314. X-4.
9. Afzal M. Airway management in pediatric anesthesia: laryngeal mask airway vs endotracheal tube. *Internet Journal of Anesthesiology*. 2007;13(1):6p. X-5, X-6, X-7.
10. Akhtar J and Orr JD. Minimally invasive orchidopexy: The transscrotal approach. *Minimally Invasive Therapy*. 1993;2 (3):135-137. X-4, X-5, X-6, X-8.
11. Al-Momani HM. Surgical anatomy of the inguinal canal in children. *Annals of Saudi Medicine*. 2006 July/August;26 (4):300-302. X-5, X-6, X-7.
12. Alpert PF and Klein RS. Spermatogenesis in the unilateral cryptorchid testis after orchiopexy. *J Urol*. 1983 Feb;129(2):301-2. X-5, X-6, X-7.
13. Amati S, Petrini E, Ceresi E, et al. Some ultrastructural aspects of Sertoli cells in cryptorchid man. *Boll Soc Ital Biol Sper*. 1983 Sep 30;59(9):1336-42. X-5, X-6, X-7.
14. Ameh EA and Mbibu HN. Management of undescended testes in children in Zaria, Nigeria. *East Afr Med J*. 2000 Sep;77(9):485-7. X-4, X-5, X-6.
15. Andersson KE. This Month in Investigative Urology. *Journal of Urology*. 2009 March;181 (3):940-944. X-1.
16. Ang CW and Forrest J. Diagnostic laparoscopy and management of the impalpable testis—a review of 10 years' practice at a non-paediatric specialist centre. *J Pediatr Urol*. 2008 Jun;4(3):214-7. X-4, X-5, X-6.
17. Arcuri VM, Serrao F, Arcuri PP, et al. Imaging of scrofum in pediatric age: Role of ultrasounds. [Italian, English]. *Rivista Italiana di Medicina dell'Adolescenza*. 2005 May;3 (2 SUPPL. 2):9-13. X-1, X-9.
18. Argos Rodriguez MD, Unda Freire A, Ruiz Orpez A, et al. Diagnostic and therapeutic laparoscopy for nonpalpable testis. *Surg Endosc*. 2003 Nov;17(11):1756-8. X-4, X-5, X-6.
19. Ariyaprakasi W. Single stage repair for severe hypospadias. *J Med Assoc Thai*. 1988 Jan;71(1):20-4. X-4, X-5, X-6, X-7.
20. Aso C, Enriquez G, Fite M, et al. Gray-scale and color Doppler sonography of scrotal disorders in children: an update. *Radiographics*. 2005 Sep-Oct;25(5):1197-214. X-5, X-6, X-7.
21. Aziz SA, Ahmad M and Singh B. Cryptorchidism. *Saudi Medical Journal*. 2002 01 Dec;23 (12):1549. X-5, X-6, X-7.
22. Backhouse KM. Development and descent of the testis. *Eur J Pediatr*. 1982 Dec;139(4):249-52. X-1.
23. Baillie CT, Fearn G, Kitteringham L, et al. Management of the impalpable testis: the role of laparoscopy. *Arch Dis Child*. 1998 Nov;79(5):419-22. X-4, X-5, X-6.
24. Bakr AA and Kotb M. Laparoscopic orchidopexy: the treatment of choice for the impalpable undescended testis. *JLSLS*. 1998 Jul-Sep;2(3):259-62. X-2.
25. Banieghbal B and Davies M. Laparoscopic evaluation of testicular mobility as a guide to management of intra-abdominal testes. *World J Urol*. 2003 May;20(6):343-5. X-4, X-5, X-6.
26. Banwell PE, Hill AD, Menzies-Gow N, et al. Laparoscopic management of cryptorchidism and associated inguinal hernia. *Br J Urol*. 1994 Aug;74(2):245-6. X-4, X-5, X-6, X-7.
27. Bartone FF, Huseman CA, Maizels M, et al. Pitfalls in using human chorionic gonadotropin stimulation test to diagnose anorchia. *Journal of Urology*. 1984;132 (3):563-567. X-5, X-6, X-7, X-8.
28. Batata MA, Chu FC, Hilaris BS, et al. Testicular cancer in cryptorchids. *Cancer*. 1982 Mar 1;49(5):1023-30. X-5, X-6, X-7.
29. Batata MA, Whitmore WF, Jr., Chu FC, et al. Cryptorchidism and testicular cancer. *J Urol*. 1980 Sep;124(3):382-7. X-5, X-6, X-7.
30. Beasley S. The undescended testis: Clinical assessment and management pathways. *Middle East Paediatrics*. 2006 Dec;11 (4):104-107. X-1.
31. Beck RO, Nicholl P, Hickey NC, et al. Laparoscopic excision of an intra-abdominal testis. *Br J Urol*. 1992 Jul;70(1):105-6. X-1, X-4, X-5, X-6.

32. Beitler JC, Gomes SM, Coelho ACJ, et al. Complex inguinal hernia repairs. *Hernia*. 2009;13 (1):61-66. X-5, X-6, X-7.
33. Belgorosky A and Rivarola MA. Sex hormone-binding globulin response to human chorionic gonadotropin stimulation in children with cryptorchidism, anorchia, male pseudohermaphroditism, and micropenis. *Journal of Clinical Endocrinology and Metabolism*. 1982;54 (4):698-704. X-5, X-6, X-7.
34. Bellinger MF. Editorial Comment. *Journal of Urology*. 2007 Oct;178 (4 SUPPLEMENT):1724-1725. X-1.
35. Bellinger MF. Editorial Comment. *Journal of Urology*. 2008 October;180 (4 SUPPL.):1808-1809. X-1.
36. Belman AB. Office pediatric urology. *Urol Clin North Am*. 1980 Feb;7(1):63-77. X-1.
37. Benson RC, Jr., Beard CM, Kelalis PP, et al. Malignant potential of the cryptorchid testis. *Mayo Clin Proc*. 1991 Apr;66(4):372-8. X-5, X-6, X-7, X-8.
38. Beomonte Zobel B, Vicentini C, Masciocchi C, et al. Magnetic resonance imaging in the localization of undescended abdominal testes. *Eur Urol*. 1990;17(2):145-8. X-2.
39. Bianchi A. management of the impalpable testis. The role of microvascular orchidopexy. *Pediatric Surgery International*. 1990;5 (1):48-57. X-4, X-5, X-6.
40. Bianchi A and Squire BR. Transscrotal orchidopexy: Orchidopexy revised. *Pediatric Surgery International*. [Journal]. 1989;4 (3):189-192. X-4, X-5, X-6.
41. Bibbo M and Gill WB. Screening of adolescents exposed to diethylstilbestrol in utero. *Pediatr Clin North Am*. 1981 May;28(2):379-88. X-1.
42. Bilham S. Boy story. *Nurs Times*. 2000 Mar 16-22;96(11):30-1. X-1.
43. Bittencourt DG, Miranda ML, Moreira APP, et al. The role of videolaparoscopy in the diagnostic and therapeutic approach of nonpalpable testis. *International Braz J Urol*. 2003 Jul;29 (4):345-351. X-4, X-5, X-6, X-8.
44. Bjerklund Johansen TE and Larmo A. Ultrasound in the evaluation of retractile and truly undescended testes. *Scand J Urol Nephrol*. 1988;22(4):245-50. X-10.
45. Blei L, Sihelnik S and Bloom D. Ultrasonographic analysis of chronic intratesticular pathology. *Journal of Ultrasound in Medicine*. [Journal]. 1983;2 (1):17-23. X-5, X-6, X-7.
46. Bloom C, Hamilton P, Cassoff J, et al. Scrotal ultrasonography: a pictorial essay. *Can Assoc Radiol J*. 1998 Feb;49(1):12-20. X-1.
47. Boddy SA, Corkery JJ and Gornall P. The place of laparoscopy in the management of the impalpable testis. *Br J Surg*. 1985 Nov;72(11):918-9. X-4, X-5, X-6.
48. Boddy SA, Gordon AC, Thomas DF, et al. Experience with the Fowler Stephens and microvascular procedures in the management of intraabdominal testes. *Br J Urol*. 1991 Aug;68(2):199-202. X-4, X-5, X-6, X-8.
49. Boeckmann W, Brauers A, Mersdorf A, et al. Diagnostic and therapeutic laparoscopy of the nonpalpable testis. *Scand J Urol Nephrol*. 1996 Dec;30(6):479-84. X-4, X-5, X-6, X-8.
50. Bogaert GA, Kogan BA and Mevorach RA. Therapeutic laparoscopy for intra-abdominal testes. *Urology*. 1993 Aug;42(2):182-8. X-4, X-5, X-6, X-8.
51. Bollerslev J, Rohl H, Krag Sorensen E, et al. Gonadotropin and androgen levels in patients operated upon for cryptorchidism. *Dan Med Bull*. 1986 Dec;33(6):336-8. X-4, X-5, X-6, X-7.
52. Borkenstein M. Intranasal LH-RH for cryptorchidism: response to initial treatment and to treatment after relapse. *Eur J Pediatr*. 1987;146 Suppl 2:S42-3. X-4, X-5, X-6.
53. Brendler H. Cryptorchidism and cancer. *Prog Clin Biol Res*. 1985;203:189-96. X-1.
54. Brock IJW. Laparoscopic orchidopexy for the nonpalpable testis. *Pediatric Endosurgery and Innovative Techniques*. 2000;4 (3):189-194. X-4, X-5, X-6, X-8.
55. Brock JW, 3rd, Holcomb GW, 3rd and Morgan WM, 3rd. The use of laparoscopy in the management of the nonpalpable testis. *J Laparoendosc Surg*. 1996 Mar;6 Suppl 1:S35-9. X-4, X-5, X-6, X-8.
56. Brown RA, Millar AJ, Jee LD, et al. The value of laparoscopy for impalpable testes. *S Afr J Surg*. 1997 May;35(2):70-3. X-4.
57. Brown TR, Berkovitz GD and Gearhart JP. Androgen receptors in boys with isolated bilateral cryptorchidism. *Am J Dis Child*. 1988 Sep;142(9):933-6. X-4, X-5, X-6, X-7.
58. Bukowski TP, Sedberry S and Richardson B. Is human chorionic gonadotropin useful for identifying and treating nonpalpable testis? *J Urol*. 2001 Jan;165(1):221-3. X-4, X-5, X-6, X-8.
59. Bundak R, Ermis B, Bas F, et al. Comparison of the effect of two modes of hCG stimulation on testicular descent and on plasma testosterone levels in children with true unilateral cryptorchidism. *International Pediatrics*. 2007 Mar;22 (1):8-12. X-4, X-5, X-6, X-7.
60. Burger RA and Hohenfellner R. Are boys with the syndrome of agenesis of the anterior abdominal wall muscles always infertile when they grow up? *Pediatr Nephrol*. 1989 Apr;3(2):185. X-1.
61. Cacciari E, Frejaville E and Becca A. Treatment of cryptorchidism by intranasal synthetic LH-RH and its analogue D-Ser(TBU)6-LHRH-EA10. *Eur J Pediatr*. 1982 Dec;139(4):280-4. X-10.
62. Cale AR, Farouk M, Prescott RJ, et al. Does vasectomy accelerate testicular tumour? Importance of testicular examinations before and after vasectomy. *BMJ*. 1990 Feb 10;300(6721):370. X-5, X-6, X-7.

63. Campbell DM, Webb JA and Hargreave TB. Cryptorchidism in Scotland. *Br Med J (Clin Res Ed)*. 1987 Nov 14;295(6608):1235-6. X-5, X-6, X-7.
64. Canavese F, Cortese MG, Gennari F, et al. Non-palpable testes. Orchiopexy in single stage. *Eur J Pediatr Surg*. 1995 Apr;5(2):104-5. X-4, X-5, X-6.
65. Canavese F, Cortese MG, Magro P, et al. Cryptorchidism: medical and surgical treatment in the 1st year of life. *Pediatr Surg Int*. 1998 Nov;14(1-2):2-5. X-10.
66. Canavese F, Lalla R, Linari A, et al. Surgical treatment of cryptorchidism. *Eur J Pediatr*. 1993;152 Suppl 2:S43-4. X-4, X-5, X-6.
67. Canavese F, Mussa A, Manenti M, et al. Sperm count of young men surgically treated for cryptorchidism in the first and second year of life: fertility is better in children treated at a younger age. *Eur J Pediatr Surg*. 2009 Dec;19(6):388-91. X-4, X-5, X-6, X-7.
68. Canning DA. Early orchiopexy: prepubertal intratubular germ cell neoplasia and fertility outcome. *J Urol*. 2001 Jan;165(1):328-9. X-1.
69. Caroppo E, Niederberger C, Elhanbly S, et al. Effect of cryptorchidism and retractile testes on male factor infertility: a multicenter, retrospective, chart review. *Fertil Steril*. 2005 May;83(5):1581-4. X-5, X-6, X-7, X-8.
70. Carpi A, Fabris GF, Chiechi A, et al. Spermatogenesis in azoospermic, formerly cryptorchid men. Use of needle aspiration techniques. *Acta Cytol*. 2002 Sep-Oct;46(5):848-54. X-5, X-6, X-7, X-8.
71. Cartwright PC, Velagapudi S, Snyder HM, 3rd, et al. A surgical approach to reoperative orchiopexy. *J Urol*. 1993 Apr;149(4):817-8. X-4, X-5, X-6.
72. Casale P and Canning DA. Laparoscopic orchiopexy. *BJU Int*. 2007 Nov;100(5):1197-206. X-1.
73. Castilho LN. Laparoscopy for the nonpalpable testis: how to interpret the endoscopic findings. *J Urol*. 1990 Nov;144(5):1215-8. X-4, X-5, X-6.
74. Castilho LN and Ferreira U. Laparoscopy in adults and children with nonpalpable testes. *Andrologia*. 1987 Sep-Oct;19(5):539-43. X-4, X-5, X-6.
75. Celani MF, Montanini V and Baraghini GF. Bioactive and immunoreactive luteinizing hormone in cryptorchid children. *IRCS Medical Science. [Journal]*. 1983;11 (10):911-912. X-5, X-6, X-7, X-8.
76. Cendron M, Huff DS, Keating MA, et al. Anatomical, morphological and volumetric analysis: a review of 759 cases of testicular maldescent. *J Urol*. 1993 Mar;149(3):570-3. X-4, X-5, X-6.
77. Cendron M, Keating MA, Huff DS, et al. Cryptorchidism, orchiopexy and infertility: a critical long-term retrospective analysis. *J Urol*. 1989 Aug;142(2 Pt 2):559-62; discussion 572. X-4, X-5, X-6.
78. Chemes HE, Gottlieb SE, Pasqualini T, et al. Response to acute hCG stimulation and steroidogenic potential of Leydig cell fibroblastic precursors in humans. *J Androl*. 1985 Mar-Apr;6(2):102-12. X-4, X-5, X-6, X-7.
79. Chin TW, Yeh TJ and Wei CF. Intranasal luteinizing hormone releasing hormone in the treatment of cryptorchism. *Journal of Surgical Association Republic of China. [Journal]*. 1988;21 (4):421-426. X-4, X-5, X-6, X-8.
80. Choi YJ and Reiner L. Autoimmune response following vasectomy. *N Y State J Med*. 1983 May;83(6):819-22. X-5, X-6, X-7.
81. Christiansen P, Andersson AM, Skakkebaek NE, et al. Serum inhibin B, FSH, LH and testosterone levels before and after human chorionic gonadotropin stimulation in prepubertal boys with cryptorchidism. *Eur J Endocrinol*. 2002 Jul;147(1):95-101. X-4, X-5, X-6, X-7.
82. Chui CH and Jacobsen AS. Laparoscopy in the evaluation of the non-palpable undescended testes. *Singapore Med J*. 2000 May;41(5):206-8. X-4, X-5, X-6.
83. Cinti S, Barbatelli G, Pierleoni C, et al. The normal, cryptorchid and retractile prepuberal human testis: a comparative morphometric ultrastructural study of 101 cases. *Scanning Microsc*. 1993 Mar;7(1):351-8; discussion 358-62. X-5, X-6, X-7.
84. Cisek LJ, Peters CA, Atala A, et al. Current findings in diagnostic laparoscopic evaluation of the nonpalpable testis. *J Urol*. 1998 Sep;160(3 Pt 2):1145-9; discussion 1150. X-4, X-5, X-6.
85. Clark DA and Borzi PA. Laparoscopic orchidopexy for the intra-abdominal testis. *Pediatr Surg Int*. 1999;15(7):454-6. X-4, X-5, X-6.
86. Cloud DT. Major ambulatory surgery of the pediatric patient. *Surg Clin North Am*. 1987 Aug;67(4):805-17. X-4, X-5, X-6, X-7.
87. Cohen Z, Shinhar D, Kurzbar E, et al. Laproscopic and thoracoscopic surgery in children and adolescents: A 3-year experience. *Pediatric Surgery International*. 1997 Jul;12 (5-6):356-359. X-5, X-6, X-7.
88. Cook B, Grubb DJ, Aldridge LA, et al. Comparison of the effects of adrenaline, clonidine and ketamine on the duration of caudal analgesia produced by bupivacaine in children. *Br J Anaesth*. 1995 Dec;75(6):698-701. X-4, X-5, X-6, X-7.
89. Cooper BJ and Little TM. Orchidopexy: theory and practice. *Br Med J (Clin Res Ed)*. 1985 Sep 14;291(6497):706-7. X-5, X-6, X-7.
90. Coppola CP, Leininger BE, Rasmussen TE, et al. Children treated at an expeditionary military hospital in Iraq. *Archives of Pediatrics and Adolescent Medicine*. 2006;160 (9):972-976. X-4, X-5, X-6, X-7.
91. Corbally MT, Quinn FJ and Guiney EJ. The effect of two-stage orchiopexy on testicular growth. *Br J Urol*. 1993 Sep;72(3):376-8. X-4, X-5, X-6, X-8.

92. Cornud F, Amar E, Hamida K, et al. Ultrasound findings in male hypofertility and impotence. *European Radiology*. 2001;11 (11):2126-2136. X-1.
93. Cortes D, Thorup J, Frisch M, et al. Examination for intratubular germ cell neoplasia at operation for undescended testis in boys. *J Urol*. 1994 Mar;151(3):722-5. X-4, X-5, X-6.
94. Cortes D, Thorup J and Petersen BL. Testicular neoplasia in undescended testes of cryptorchid boys-does surgical strategy have an impact on the risk of invasive testicular neoplasia? *Turk J Pediatr*. 2004;46 Suppl:35-42. X-4, X-5, X-6, X-7.
95. Cortes D, Thorup J and Visfeldt J. Hormonal treatment may harm the germ cells in 1 to 3-year-old boys with cryptorchidism. *J Urol*. 2000 Apr;163(4):1290-2. X-5, X-6, X-7.
96. Cortes D, Thorup JM, Lenz K, et al. Laparoscopy in 100 consecutive patients with 128 impalpable testes. *Br J Urol*. 1995 Mar;75(3):281-7. X-4, X-5, X-6, X-8.
97. Cortes D, Thorup JM and Lindenberg S. Fertility potential after unilateral orchiopexy: an age independent risk of subsequent infertility when biopsies at surgery lack germ cells. *J Urol*. 1996 Jul;156(1):217-20. X-4, X-5, X-6, X-7.
98. Cortes D, Thorup JM and Visfeldt J. Cryptorchidism: aspects of fertility and neoplasms. A study including data of 1,335 consecutive boys who underwent testicular biopsy simultaneously with surgery for cryptorchidism. *Horm Res*. 2001;55(1):21-7. X-4, X-5, X-6, X-7.
99. Cortes D, Visfeldt J, Moller H, et al. Testicular neoplasia in cryptorchid boys at primary surgery: case series. *BMJ*. 1999 Oct 2;319(7214):888-9. X-4, X-5, X-6, X-7.
100. Cortes D, Visfeldt J and Thorup JM. Erythropoietin may reduce the risk of germ cell loss in boys with cryptorchidism. *Horm Res*. 2001;55(1):41-5. X-4, X-5, X-6, X-7.
101. Coughlin MT, Bellinger MF, LaPorte RE, et al. Testicular suture: a significant risk factor for infertility among formerly cryptorchid men. *J Pediatr Surg*. 1998 Dec;33(12):1790-3. X-4, X-5, X-6.
102. Coughlin MT, O'Leary LA, Songer NJ, et al. Time to conception after orchidopexy: evidence for subfertility? *Fertil Steril*. 1997 Apr;67(4):742-6. X-4, X-5, X-6.
103. Creasy DM. Monitoring spermatogenesis. *Hum Exp Toxicol*. 1995 Jan;14(1):70-1. X-1, X-5, X-6, X-7.
104. Cross GD and Barrett RF. Comparison of two regional techniques for postoperative analgesia in children following herniotomy and orchidopexy. *Anaesthesia*. 1987 Aug;42(8):845-9. X-4, X-5, X-6, X-7.
105. Czeizel AE, Kazy Z and Vargha P. Oral tinidazole treatment during pregnancy and teratogenesis. *International Journal of Gynecology and Obstetrics*. 2003 Dec;83 (3):305-306. X-5, X-6, X-7.
106. Czeizel AE, Kazy Z and Vargha P. Vaginal treatment with povidone-iodine suppositories during pregnancy. *International Journal of Gynecology and Obstetrics*. 2004 Jan;84 (1):83-85. X-5, X-6, X-7.
107. Daghighi MH, Fathi AH and Pourfathi H. Assessment of diagnostic value of sonography for cryptorchidism. *Journal of Diagnostic Medical Sonography*. 2006 Jan-Feb;22(1):42-47. X-10.
108. Dalela D, Sinha RJ, Goel A, et al. Balloon distension of scrotum: a step to facilitate creation of dartos pouch during orchiopexy. *Pediatr Surg Int*. 2008 Apr;24(4):437-8. X-1.
109. Danso AP and Nkrumah FK. The challenges of ambiguous genitalia. *Cent Afr J Med*. 1992 Sep;38(9):367-71. X-5, X-6, X-7.
110. Das S. Laparoscopic evaluation of nonpalpable testes. *Urology*. 1991 May;37(5):460-2. X-4, X-5, X-6.
111. Dave S, Manaboriboon N, Braga LH, et al. Open versus laparoscopic staged Fowler-Stephens orchiopexy: impact of long loop vas. *J Urol*. 2009 Nov;182(5):2435-9. X-4, X-5, X-6.
112. Davey RB. Orchidopexy: the relative importance of each step of mobilisation. *Pediatr Surg Int*. 1997 Feb;12(2-3):163-4. X-4, X-5, X-6.
113. Davis BE, Noble MJ, Weigel JW, et al. Analysis and management of chronic testicular pain. *J Urol*. 1990 May;143(5):936-9. X-5, X-6, X-7.
114. Dayanc M, Kibar Y, Irkilata HC, et al. Long-term outcome of scrotal incision orchiopexy for undescended testis. *Urology*. 2007 Oct;70(4):786-8; discussion 788-9. X-4, X-5, X-6.
115. Dayanc M, Kibar Y, Tahmaz L, et al. Scrotal incision orchiopexy for undescended testis. *Urology*. 2004 Dec;64(6):1216-8; discussion 1219. X-4, X-5, X-6.
116. De Boe V, De Backer A and Braeckman J. Laparoscopy: any indication in the work-up and treatment of undescended testis? *Acta Urol Belg*. 1995 May;63(2):89-91. X-1.
117. de Gouveia Brazao CA, Pierik FH, Erenpreiss Y, et al. The effect of cryptorchidism on inhibin B in a subfertile population. *Clin Endocrinol (Oxf)*. 2003 Jul;59(1):136-41. X-5, X-6, X-7.
118. de Kretser DM and Kerr JB. The effect of testicular damage on Sertoli and Leydig cell function. *Monogr Endocrinol*. 1983;25:133-54. X-1.
119. De la Hunt MN. Paediatric day care surgery: A hidden burden for primary care? *Annals of the Royal College of Surgeons of England*. 1999 May;81 (3):179-182. X-5, X-6, X-7.
120. De Luna AM, Ortenberg J and Craver RD. Exploration for testicular remnants: implications of residual seminiferous tubules and crossed testicular ectopia. *J Urol*. 2003 Apr;169(4):1486-9. X-5, X-6, X-7.
121. De Rosa G, Della Casa S, Corsello SM, et al. Treatment of undescended testes with hMG and hMG plus hCG: clinical, hormonal and sonographic evaluation. *Ann Endocrinol (Paris)*. 1987;48(6):468-72. X-4, X-5, X-6, X-8.

122. Delemarre-Van de Waal HA. Induction of testicular growth and spermatogenesis by pulsatile, intravenous administration of gonadotrophin-releasing hormone in patients with hypogonadotrophic hypogonadism. *Clin Endocrinol (Oxf)*. 1993 May;38(5):473-80. X-5, X-6, X-7.
123. Demirbilek S, Atayurt HF, Celik N, et al. Does treatment with human chorionic gonadotropin induce reversible changes in undescended testes in boys? *Pediatr Surg Int*. 1997;12(8):591-4. X-4, X-5, X-6, X-8.
124. Demircan M, Akinci A and Mutus M. The effects of orchiopexy on serum anti-Mullerian hormone levels in unilateral cryptorchid infants. *Pediatr Surg Int*. 2006 Mar;22(3):271-3. X-4, X-5, X-6.
125. Denes FT, Arap MA, Giron AM, et al. Comprehensive surgical treatment of prune belly syndrome: 17 years' experience with 32 patients. *Urology*. 2004 Oct;64 (4):789-793. X-4, X-5, X-6, X-7.
126. Denes FT, Silva FAQ, Giron AM, et al. Laparoscopic evaluation and treatment of the impalpable testis. *Brazilian Journal of Urology*. 2001;27 (4):380-385. X-9.
127. Denis L and Pacco J. The diagnostic work-up of the undescended testis. *Prog Clin Biol Res*. 1985;203:201-6. X-1.
128. Dickerman Z, Bauman B, Sandovsky U, et al. Human chorionic gonadotropin (hCG) treatment in cryptorchidism. *Andrologia*. 1983;15 Spec No:542-7. X-4, X-5, X-6.
129. Diez Pardo JA. Pediatric microsurgery. *World Journal of Surgery*. 1985;9 (2):300-309. X-1.
130. DiGiacinto TM, Patten D, Willscher M, et al. Sonography of the scrotum. *Medical Ultrasound*. [Journal]. 1982;6 (3):95-101. X-5, X-6, X-7, X-8.
131. Dixon J, Wallace AM, O'Toole S, et al. Prolonged human chorionic gonadotrophin stimulation as a tool for investigating and managing undescended testes. *Clinical Endocrinology*. 2007 Dec;67 (6):816-821. X-5, X-8.
132. DuBois JJ and Pokorny WJ. A technique for fixation of the mobilized testis in neonatal herniorrhaphy. *Pediatric Surgery International*. 1993;8 (1):94-95. X-1.
133. Dunn JCY, Kawaguchi AL and Fonkalsrud EW. Undescended testes/orchiopexy. *Operative Techniques in General Surgery*. 2004 Dec;6 (4 SPEC. ISS.):269-280. X-1.
134. Eiholzer U, l'Allemand D, Rousson V, et al. Hypothalamic and gonadal components of hypogonadism in boys with Prader-Labhart- Willi syndrome. *J Clin Endocrinol Metab*. 2006 Mar;91(3):892-8. X-5, X-6, X-7.
135. El Zoghbi CS, Favorito LA, Costa WS, et al. Structural analysis of gubernaculum testis in cryptorchid patients submitted to treatment with human chorionic gonadotrophin. *Int Braz J Urol*. 2007 Mar-Apr;33(2):223-9; discussion 230. X-4, X-5, X-6, X-8.
136. El-Anany F, Gad El-Moula M, Abdel Moneim A, et al. Laparoscopy for impalpable testis: Classification-based management. *Surgical Endoscopy*. 2007 Mar;21 (3):449-454. X-4.
137. Elder JS. Measurements of serum Mullerian inhibiting substance in the evaluation of children with nonpalpable gonads. *J Urol*. 1997 Oct;158(4):1637. X-1.
138. Elder JS. Bilateral neonatal testicular torsion. *J Urol*. 1998 Apr;159(4):1413-4. X-1.
139. Elder JS. Ultrasonography is unnecessary in evaluating boys with a nonpalpable testis. *Pediatrics*. 2002 Oct;110(4):748-51. X-10.
140. Erez I, Schneider N, Glaser E, et al. Prompt diagnosis of 'acute groin' conditions in infants. *Eur J Radiol*. 1992 Oct;15(3):185-9. X-5, X-6, X-7.
141. Esposito C and Garipoli V. The value of 2-step laparoscopic Fowler-Stephens orchiopexy for intra-abdominal testes. *J Urol*. 1997 Nov;158(5):1952-4; discussion 1954-5. X-4, X-5, X-6, X-7.
142. Esposito C, Lima M, Mattioli G, et al. Complications of pediatric urological laparoscopy: mistakes and risks. *J Urol*. 2003 Apr;169(4):1490-2; discussion 1492. X-4, X-5, X-6, X-7.
143. Fait G, Yaron Y, Shenhar D, et al. Sonographic detection of undescended testes in the third trimester. *J Ultrasound Med*. 2002 Jan;21(1):15-8; quiz 20. X-5, X-6, X-7, X-8.
144. Fallon B and Kennedy TJ. Long-term follow-up of fertility in cryptorchid patients. *Urology*. 1985 May;25(5):502-4. X-4.
145. Farley SJ. Surveillance or biopsy for men with testicular microlithiasis? *Nature Reviews Urology*. 2010 September;7 (9):478. X-1.
146. Favorito LA, Costa WS and Sampaio FJ. Analysis of anomalies of the epididymis and processus vaginalis in human fetuses and in patients with cryptorchidism treated and untreated with human chorionic gonadotropin. *BJU Int*. 2006 Oct;98(4):854-7. X-10.
147. Favorito LA and Toledo Fo JS. Study of testicular migration after treatment with human chorionic gonadotropin in patients with cryptorchidism. *Brazilian Journal of Urology*. 2001;27 (3):270-274. X-9.
148. Fedder J and Boesen M. Effect of a combined GnRH/hCG therapy in boys with undescended testicles: evaluated in relation to testicular localization within the first week after birth. *Arch Androl*. 1998 May-Jun;40(3):181-6. X-4.
149. Fedder J, Hansen LG and Hjort T. Reduced level of sex-specific antigen (H-Y antigen) on lymphocytes in some patients with bilateral cryptorchidism. *Arch Androl*. 1989;22(1):67-75. X-5, X-6, X-7.
150. Fento EJM, Woodward AA, Hudson IL, et al. The ascending testis. *Pediatric Surgery International*. 1990;5 (1):6-9. X-4, X-5, X-6.
151. Ferlin A, Zuccarello D, Zuccarello B, et al. Genetic alterations associated with cryptorchidism. *JAMA*. 2008 Nov 19;300(19):2271-6. X-5, X-6, X-7.

152. Ferreira U, Cassiano Esteves S, Nogueira Castilho L, et al. Laparoscopy in the management of nonpalpable testes and intersex states. *Arch Esp Urol*. 1993 Sep;46(7):638-41. X-4, X-5, X-6, X-7.
153. Ferro F, Inon A, Caterino S, et al. Staged orchidopexy: simplifying the second stage. *Pediatric Surgery International*. 1990;5 (1):10-12. X-4, X-5, X-6, X-8.
154. Ferro F, Lais A, Bagolan P, et al. Impact of primary surgical approach in the management of the impalpable testis. *Eur Urol*. 1992;22(2):142-6. X-4, X-5, X-6.
155. Ferro F, Lais A and Gonzalez-Serva L. Benefits and afterthoughts of laparoscopy for the nonpalpable testis. *J Urol*. 1996 Aug;156(2 Pt 2):795-8; discussion 798. X-10.
156. Findlow D, Aldridge LM and Doyle E. Comparison of caudal block using bupivacaine and ketamine with ilioinguinal nerve block for orchidopexy in children. *Anaesthesia*. 1997 Nov;52(11):1110-3. X-4, X-5, X-6.
157. Flett ME, Jones PF and Youngson GG. Emerging trends in the management of the impalpable testis. *Br J Surg*. 1999 Oct;86(10):1280-3. X-4, X-5, X-6, X-8.
158. Fonkalsrud EW. The role and timing of surgery for cryptorchidism. *Aust N Z J Surg*. 1984 Oct;54(5):431-4. X-1.
159. Fonkalsrud EW. Testicular undescended and torsion. *Pediatr Clin North Am*. 1987 Oct;34(5):1305-17. X-1.
160. Foresta C, Ferlin A, Garolla A, et al. Functional and cytologic features of the contralateral testis in cryptorchidism. *Fertil Steril*. 1996 Oct;66(4):624-9. X-10.
161. Forte F, Bitelli M, Sorrenti S, et al. Testicular fixation in adult retractile testis: technical notes. *Chir Ital*. 2003 Jan-Feb;55(1):145-7. X-4, X-5, X-6, X-7.
162. Fossa SD, Klepp O, Molne K, et al. Testicular function after unilateral orchiectomy for cancer and before further treatment. *Int J Androl*. 1982 Apr;5(2):179-84. X-5, X-6, X-7.
163. Fossa SD and Ous S. Primary unilateral retroperitoneal lymph node dissection (RLND) in non-seminomatous testicular cancer. *Prog Clin Biol Res*. 1985;203:319. X-5, X-6, X-7.
164. Frederick LR, Ballek NK, Esplin JA, et al. Primary carcinoid tumor presenting as a nonpalpable testicular mass. *J Clin Oncol*. 2010 Nov 1;28(31):e637-9. X-1, X-5, X-6, X-7.
165. Freedman AL. Prenatal scrotal ultrasound: providing new clues in cryptorchidism. *Ultrasound Obstet Gynecol*. 1998 Apr;11(4):240. X-1.
166. Freud E and Zer M. Minimally invasive surgery in pediatric endocrinology. *Journal of Pediatric Endocrinology and Metabolism*. 2000;13 (3):241-244. X-1.
167. Frick J. LHRH and cryptorchidism. *Eur J Pediatr*. 1993;152 Suppl 2:S28-30. X-4, X-5, X-6, X-8.
168. Frick J, Danner C, Kunit G, et al. The effect of chronic administration of a synthetic LH-RH analogue intranasally in cryptorchid boys. *Int J Androl*. 1980 Oct;3(5):469-78. X-4, X-5, X-6, X-8.
169. Friedland GW and Chang P. The role of imaging in the management of the impalpable undescended testis. *AJR Am J Roentgenol*. 1988 Dec;151(6):1107-11. X-1.
170. Fritzsche PJ. MRI of the scrotum. *Urol Radiol*. 1988;10(1):52-7. X-1.
171. Fritzsche PJ, Hricak H, Kogan BA, et al. Undescended testis: value of MR imaging. *Radiology*. 1987 Jul;164(1):169-73. X-2, X-8.
172. Froeling FM, Sorber MJ, de la Rosette JJ, et al. The nonpalpable testis and the changing role of laparoscopy. *Urology*. 1994 Feb;43(2):222-7. X-4, X-5, X-6, X-7.
173. Fryczkowski M, Paradysz A and Krauze-Balwinska Z. Late results of operative treatment of intersexuality in children with advanced hypospadias and simultaneous cryptorchidism. *Int Urol Nephrol*. 1996;28(2):241-5. X-4, X-5, X-6, X-7.
174. Fukuzaki A, Tanahashi Y, Orikasa S, et al. Laparoscopic examination for nonpalpable testes. *Japanese Journal of Endourology and ESWL*. 1990;3 (1):66-69. X-4, X-5, X-6, X-8.
175. Gadiyar V, Gallagher TM, Crean PM, et al. The effect of a combination of rectal diclofenac and caudal bupivacaine on postoperative analgesia in children. *Anaesthesia*. 1995 Sep;50(9):820-2. X-5, X-6, X-7.
176. Gaines KK. Human chorionic gonadotropin use in undescended testicle and infertility. *Urol Nurs*. 2005 Jun;25(3):212-3. X-1.
177. Galli P, Bartolini E, Franchi F, et al. Treatment of cryptorchidism by intramuscular administration of LHRH. *Reproduccion*. 1980 Jul-Sep;4(3):247-54. X-4, X-5, X-6, X-8.
178. Garagorri JM, Job JC, Canlorbe P, et al. Results of early treatment of cryptorchidism with human chorionic gonadotropin. *J Pediatr*. 1982 Dec;101(6):923-7. X-4, X-5, X-6.
179. Garel L, Lucaya J and Piqueras J. Clinical quiz. Torsion of an intra-abdominal benign testicular teratoma. *Pediatr Radiol*. 2004 Feb;34(2):183-4. X-1.
180. Garg SK, Yopadhyay PK and Ram B. Gonadotrophin stimulation in children with abnormal sexual development. *S Afr Med J*. 1989 Sep 2;76(5):199-201. X-4, X-5, X-6, X-7.
181. Gatti JM, Cooper CS and Kirsch AJ. Bimanual digital rectal examination for the evaluation of the nonpalpable testis. *J Urol*. 2003 Jul;170(1):207-10. X-5, X-6, X-7.
182. Gaur DD. Laparoscopic orchidopexy: a simple technique for establishing the abdominoscrotal port. *Br J Urol*. 1994 Dec;74(6):793-4. X-1.
183. Gesino A and Bachmann De Santos ME. Spermatic cord torsion after testicular fixation. A different surgical approach and a revision of current techniques. *Eur J Pediatr Surg*. 2001 Dec;11(6):404-10. X-4, X-5, X-6.

184. Ghirri P, Ciulli C, Vuerich M, et al. Incidence at birth and natural history of cryptorchidism: a study of 10,730 consecutive male infants. *J Endocrinol Invest.* 2002 Sep;25(8):709-15. X-5, X-6, X-7.
185. Giannopoulos MF, Vlachakis IG and Charissis GC. 13 Years' experience with the combined hormonal therapy of cryptorchidism. *Horm Res.* 2001;55(1):33-7. X-4, X-5, X-6.
186. Gibbs TD. Cryptorchidism and orchiopexy--part I. *AUAA J.* 1983 Oct-Dec;4(2):4-9. X-1.
187. Gibbs TD. Cryptorchidism and orchiopexy--part II. *AUAA J.* 1984 Jan-Mar;4(3):5-10. X-1.
188. Gill B, Kogan S, Starr S, et al. Significance of epididymal and ductal anomalies associated with testicular maldescent. *J Urol.* 1989 Aug;142(2 Pt 2):556-8; discussion 572. X-4, X-6, X-7.
189. Gill IS. Needlescopic urology: current status. *Urol Clin North Am.* 2001 Feb;28(1):71-83. X-4, X-5, X-6, X-7.
190. Girard J and Hadziselimovic F. Relevance of urinary gonadotrophins. *Eur J Pediatr.* 1987;146 Suppl 2:S18-20. X-5, X-6, X-7, X-8.
191. Giwercman A, Berthelsen JG, Muller J, et al. Carcinoma-in-situ of the cryptorchid testis. *Prog Clin Biol Res.* 1985;203:177-88. X-1, X-5, X-6, X-7.
192. Giwercman A, Bruun E, Fridodt-Moller C, et al. Prevalence of carcinoma in situ and other histopathological abnormalities in testes of men with a history of cryptorchidism. *J Urol.* 1989 Oct;142(4):998-1001: discussion 1001-2. X-4, X-5, X-6, X-7.
193. Giwercman A, Clausen OP, Bruun E, et al. The value of quantitative DNA flow cytometry of testicular fine-needle aspirates in assessment of spermatogenesis: a study of 137 previously maldescended human testes. *Int J Androl.* 1994 Feb;17(1):35-42. X-5, X-6, X-7.
194. Giwercman A, Grindsted J, Hansen B, et al. Testicular cancer risk in boys with maldescended testis: a cohort study. *J Urol.* 1987 Nov;138(5):1214-6. X-5, X-6, X-7.
195. Glassberg KI. Annual meeting of the section on pediatric urology. *Pediatrics.* [Journal]. 1987;80 (1):111-117. X-1.
196. Goblyos P and Szule E, Jr. Liquid crystal thermography in the localization of undescended testicles. *Eur J Radiol.* 1987 Nov;7(4):266-7. X-2.
197. Godbole PP, Morecroft JA and Mackinnon AE. Laparoscopy for the impalpable testis. *Br J Surg.* 1997 Oct;84(10):1430-2. X-5, X-6, X-7, X-8.
198. Godbole PP and Najmaldin AS. Laparoscopic orchidopexy in children. *J Endourol.* 2001 Apr;15(3):251-6. X-1.
199. Goede J, Hack WW, van der Voort-Doedens LM, et al. Testicular microlithiasis in boys and young men with congenital or acquired undescended (ascending) testis. *J Urol.* 2010 Apr;183(4):1539-43. X-5, X-6, X-7.
200. Goh DW and Hutson JM. The retractile testis: time for a reappraisal. *J Paediatr Child Health.* 1993 Dec;29(6):407-8. X-1.
201. Gokce MO, Burgu B, Aydogdu O, et al. Transverse testicular ectopia associated with persistent mullerian duct syndrome: Another entity in which magnetic resonance imaging is unreliable. *Urology.* 2010 December;76 (6):1457-1461. X-5, X-6, X-7, X-8.
202. Gokcora IH and Yagmurlu A. A longitudinal follow-up using the high trans-scrotal approach for inguinal and scrotal abnormalities in boys. *Hernia.* 2003 Dec;7 (4):181-184. X-4, X-5, X-6, X-7.
203. Gokhale S. High resolution ultrasonography of the anterior abdominal wall. *Indian Journal of Radiology and Imaging.* 2007 01 Nov;17 (4):290-298. X-1.
204. Golabek T and Kiely E. Patterns of referral and treatment of undescended testis: a 12-year experience in a single centre. *Ir J Med Sci.* 2010 Dec;179(4):511-4. X-4, X-5, X-6, X-8.
205. Golan DT, Shmuel S and Bar-Maor JA. Autoimmune reaction in cryptorchidism? *Z Kinderchir.* 1981 Jan;32(1):79-83. X-4, X-5, X-6, X-7.
206. Gomez Leon MN, Ferreiros J, Casanova R, et al. The value of computed tomography in the localization of undescended testes. *Eur J Radiol.* 1986 Nov;6(4):283-7. X-8.
207. Gomez-Perez R, Osuna JA and Arata-Bellabarba G. Surgical vs. untreated cryptorchidism: effects on fertility. *Arch Androl.* 2004 Jan-Feb;50(1):19-22. X-2, X-10.
208. Govan DE and Kessler R. Urologic problems in the adolescent male. *Pediatr Clin North Am.* 1980 Feb;27(1):109-24. X-1.
209. Govender D, Sing Y and Chetty R. Sertoli cell nodules in the undescended testis: a histochemical, immunohistochemical, and ultrastructural study of hyaline deposits. *J Clin Pathol.* 2004 Aug;57(8):802-6. X-5, X-6, X-7.
210. Gracia J, Gonzalez N, Gomez ME, et al. Clinical and anatomopathological study of 2000 cryptorchid testes. *Br J Urol.* 1995 Jun;75(6):697-701. X-5, X-6, X-7.
211. Gracia J, Navarro E, Guirado F, et al. Spontaneous ascent of the testis. *Br J Urol.* 1997 Jan;79(1):113-5. X-4, X-5, X-6, X-7.
212. Gracia J, Sanchez J, Garcia C, et al. What is the relationship between spermatozoa per milliliter at adulthood and the tubular fertility index at surgical age for patients with cryptorchidism? *J Pediatr Surg.* 1998 Apr;33(4):594-6. X-4, X-5, X-6, X-7.
213. Gracia J, Sanchez Zalabardo J, Sanchez Garcia J, et al. Clinical, physical, sperm and hormonal data in 251 adults operated on for cryptorchidism in childhood. *BJU Int.* 2000 Jun;85(9):1100-3. X-4, X-5, X-6, X-7.

214. Graif M, Czerniak A, Avigad I, et al. High-resolution sonography of the undescended testis in childhood: an analysis of 45 cases. *Isr J Med Sci.* 1990 Jul;26(7):382-5. X-2.
215. Grasso M, Buonaguidi A, Lania C, et al. Postpubertal cryptorchidism: review and evaluation of the fertility. *Eur Urol.* 1991;20(2):126-8. X-4, X-5, X-6, X-8.
216. Gray J. Undescended testes. *N Z Nurs J.* 1981 Jan;74(1):6. X-1.
217. Guar DD, Agarwal DK, Purohit KC, et al. Laparoscopic orchiopexy for the intra-abdominal testis. *J Urol.* 1995 Feb;153(2):479-81. X-4, X-5, X-6.
218. Gueugniaud PY, Abisseror M, Moussa M, et al. The hemodynamic effects of pneumoperitoneum during laparoscopic surgery in healthy infants: assessment by continuous esophageal aortic blood flow echo-Doppler. *Anesth Analg.* 1998 Feb;86(2):290-3. X-4, X-5, X-6, X-7.
219. Guiney EJ, Corbally M and Malone PS. Laparoscopy and the management of the impalpable testis. *Br J Urol.* 1989 Mar;63(3):313-6. X-4, X-5, X-6.
220. Gulanikar AC, Anderson PA, Schwarz R, et al. Impact of diagnostic laparoscopy in the management of the unilateral impalpable testis. *Br J Urol.* 1996 Mar;77(3):455-7. X-4, X-5, X-6.
221. Guminska A, Slowikowska-Hilczner J, Kuzanski W, et al. Features of impaired seminiferous tubule differentiation are associated with germ cell neoplasia in adult men surgically treated in childhood because of cryptorchidism. *Folia Histochem Cytobiol.* 2007;45 Suppl 1:S163-8. X-4, X-5, X-6, X-7.
222. Gutierrez CS. Cryptorchidism. *West J Med.* 1995 Jul;163(1):67-8. X-1.
223. Guven A and Kogan BA. Undescended testis in older boys: further evidence that ascending testes are common. *J Pediatr Surg.* 2008 Sep;43(9):1700-4. X-4, X-5, X-6, X-7.
224. Gyawali B, Bhattacharyya S and Reid JA. Medical audit of community screening for undescended testes in Halton District. *Public Health.* 1993 Sep;107(5):343-7. X-4, X-5, X-6, X-7.
225. Hack WW, Meijer RW, Van Der Voort-Doedens LM, et al. Previous testicular position in boys referred for an undescended testis: further explanation of the late orchidopexy enigma? *BJU Int.* 2003 Aug;92(3):293-6. X-5, X-6, X-7.
226. Hack WW, Meijer RW, van der Voort-Doedens LM, et al. Natural course of acquired undescended testis in boys. *Br J Surg.* 2003 Jun;90(6):728-31. X-4, X-5, X-6, X-8.
227. Hack WW, Sijstermans K, van der Voort-Doedens LM, et al. The high scrotal ("gliding") testis revised. *Eur J Pediatr.* 2007 Jan;166(1):57-61. X-4, X-5, X-6, X-7.
228. Hack WW, Sijstermans K, van Dijk J, et al. Prevalence of acquired undescended testis in 6-year, 9-year and 13-year-old Dutch schoolboys. *Arch Dis Child.* 2007 Jan;92(1):17-20. X-5, X-6, X-7.
229. Hack WW, van der Voort-Doedens LM, Goede J, et al. Natural history and long-term testicular growth of acquired undescended testis after spontaneous descent or pubertal orchidopexy. *BJU Int.* 2010 Oct;106(7):1052-9. X-5, X-6, X-7, X-8.
230. Hack WW, van der Voort-Doedens LM, Sijstermans K, et al. Reduction in the number of orchidopexies for cryptorchidism after recognition of acquired undescended testis and implementation of expectative policy. *Acta Paediatr.* 2007 Jun;96(6):915-8. X-4, X-5, X-6, X-7.
231. Hadziselimovic F. Pathogenesis and treatment of undescended testes. *Eur J Pediatr.* 1982 Dec;139(4):255-65. X-1, X-5, X-8.
232. Hadziselimovic F. Treatment of cryptorchidism with GnRH. *Urol Clin North Am.* 1982 Oct;9(3):413-20. X-10.
233. Hadziselimovic F. Hormonal regulation of testicular descent and maldescent. *Prog Clin Biol Res.* 1985;203:167-76. X-1.
234. Hadziselimovic F. Hormonal treatment of the undescended testes. *Journal of Pediatric Endocrinology. [Journal].* 1986;2 (1):1-5. X-1.
235. Hadziselimovic F. Testicular and vascular changes in patients with varicocele. *Acta Urol Belg.* 1995 May;63(2):51-4. X-5, X-6, X-7.
236. Hadziselimovic F. Early successful orchidopexy does not prevent from developing azoospermia. *Int Braz J Urol.* 2006 Sep-Oct;32(5):570-3. X-4, X-5, X-6, X-7.
237. Hadziselimovic F, Girard J, Herzog B, et al. Hormonal treatment of cryptorchidism. *Horm Res.* 1982;16(3):188-92. X-4.
238. Hadziselimovic F, Girard J, Hocht B, et al. Effect of LH-RH treatment on hypothalamo-pituitary-gonadal axis and Leydig cell ultrastructure in cryptorchid boys. *Horm Res.* 1980;13(6):358-66. X-10.
239. Hadziselimovic F, Hecker E and Herzog B. The value of testicular biopsy in cryptorchidism. *Urol Res.* 1984;12(3):171-4. X-5, X-6, X-7.
240. Hadziselimovic F and Herzog B. Cryptorchidism. *Pediatric Surgery International. [Journal].* 1987;2 (3):132-141. X-1.
241. Hadziselimovic F and Herzog B. Long-term effect of a luteinizing-hormone-releasing hormone analogue (buserelin) on cryptorchid testes (extended summary). *Horm Res.* 1988;30(4-5):210; discussion 211. X-1.
242. Hadziselimovic F and Herzog B. Importance of early postnatal germ cell maturation for fertility of cryptorchid males. *Horm Res.* 2001;55(1):6-10. X-4, X-5, X-6, X-7.
243. Hadziselimovic F, Herzog B and Buser M. Development of cryptorchid testes. *Eur J Pediatr.* 1987;146 Suppl 2:S8-12. X-4, X-5, X-6, X-7.

244. Hadziselimovic F, Herzog B and Emmons LR. The incidence of seminoma and expression of cell adhesion molecule CD44 in cryptorchid boys and infertile men. *J Urol.* 1997 May;157(5):1895-7. X-4, X-5, X-6, X-7.
245. Hadziselimovic F, Herzog B, Hocht B, et al. Screening for cryptorchid boys risking sterility and results of long-term buserelin treatment after successful orchiopexy. *Eur J Pediatr.* 1987;146 Suppl 2:S59-62. X-5, X-6, X-7, X-8.
246. Hadziselimovic F, Herzog B, Huff DS, et al. The morphometric histopathology of undescended testes and testes associated with incarcerated inguinal hernia: a comparative study. *J Urol.* 1991 Aug;146(2 (Pt 2)):627-9. X-4, X-5, X-6, X-7.
247. Hadziselimovic F, Hocht B, Herzog B, et al. Infertility in cryptorchidism is linked to the stage of germ cell development at orchidopexy. *Horm Res.* 2007;68(1):46-52. X-4, X-5, X-6, X-8.
248. Hadziselimovic F and Hoecht B. Testicular histology related to fertility outcome and postpubertal hormone status in cryptorchidism. *Klin Padiatr.* 2008 Sep-Oct;220(5):302-7. X-4, X-5, X-6, X-7.
249. Hadziselimovic F, Huff D, Duckett J, et al. Long-term effect of luteinizing hormone-releasing hormone analogue (buserelin) on cryptorchid testes. *J Urol.* 1987 Oct;138(4 Pt 2):1043-5. X-4, X-5, X-6, X-8.
250. Hadziselimovic F, Huff D, Duckett J, et al. Treatment of cryptorchidism with low doses of buserelin over a 6-months period. *Eur J Pediatr.* 1987;146 Suppl 2:S56-8. X-4, X-5, X-6, X-7.
251. Hadziselimovic F, Snyder HM and Huff DS. An unusual subset of cryptorchidism: possible end organ failure. *J Urol.* 1999 Sep;162(3 Pt 2):983-5. X-4, X-5, X-6, X-7.
252. Hadziselimovic F, Zivkovic D, Bica DT, et al. The importance of mini-puberty for fertility in cryptorchidism. *J Urol.* 2005 Oct;174(4 Pt 2):1536-9; discussion 1538-9. X-10.
253. Haertig A, Leo JP, de Fourmestraux N, et al. Clinical features of testicular tumours. *Prog Clin Biol Res.* 1985;203:221-5. X-5, X-6, X-7.
254. Hafez ESE, Ghaly IM and Ibrahim II. Endocrine profiles in pediatric andrology. III. Human chorionic gonadotropin stimulation test in cryptorchid boys. *Archives of Andrology.* 1983;11 (1):53-58. X-5, X-6, X-7.
255. Hagberg S and Westphal O. Results of combined hormonal and surgical treatment for undescended testis in boys under 3 years of age. A randomized study. *Eur J Pediatr.* 1987;146 Suppl 2:S38-9. X-10.
256. Haimov-Kochman R, Prus D, Farchat M, et al. Reproductive outcome of men with azoospermia due to cryptorchidism using assisted techniques. *Int J Androl.* 2010 Feb;33(1):e139-43. X-4, X-5, X-6, X-7.
257. Hallak J, Cocuzza M, Sarkis AS, et al. Organ-sparing microsurgical resection of incidental testicular tumors plus microdissection for sperm extraction and cryopreservation in azoospermic patients: surgical aspects and technical refinements. *Urology.* 2009 Apr;73(4):887-91; discussion 891-2. X-4, X-5, X-6, X-7.
258. Hammar M, Berg AA, Mathson K, et al. Influence of hCG treatment on the metabolism of progesterone and pregnenolone in vitro by the human undescended prepubertal testis. *Int J Androl.* 1987 Oct;10(5):647-52. X-5, X-6, X-7, X-8.
259. Hamza AF, Elrahim M, Elnagar, et al. Testicular descent: when to interfere? *Eur J Pediatr Surg.* 2001 Jun;11(3):173-6. X-5, X-6, X-7.
260. Han SW, Lee T, Kim JH, et al. Pathological difference between retractile and cryptorchid testes. *J Urol.* 1999 Sep;162(3 Pt 1):878-80. X-4, X-5, X-6, X-7.
261. Han WK, Kim JH, Hong CH, et al. Structural evidence against hormonal therapy for cryptorchid testis: abnormal gubernacular attachment. *J Urol.* 2004 Jun;171(6 Pt 1):2427-9. X-4, X-5, X-6, X-7.
262. Handa R, Kale R, Harjai M, et al. Single scrotal incision orchiopexy for palpable undescended testis. *Asian J Surg.* 2006 Jan;29(1):25-7. X-4, X-5, X-6, X-7.
263. Handa R, Kale R and Harjai MM. Laparoscopic orchiopexy: is closure of the internal ring necessary? *J Postgrad Med.* 2005 Oct-Dec;51(4):266-7; discussion 268. X-5, X-6, X-7, X-8.
264. Hannallah RS, Broadman LM, Belman AB, et al. Comparison of caudal and ilioinguinal/iliohypogastric nerve blocks for control of post-orchidopexy pain in pediatric ambulatory surgery. *Anesthesiology.* 1987 Jun;66(6):832-4. X-4, X-5, X-6, X-7.
265. Harland SJ, Rapley EA and Nicholson PW. Do all patients with bilateral testis cancer have a hereditary predisposition? *Int J Androl.* 2007 Aug;30(4):251-5; discussion 255. X-1, X-5, X-6, X-7.
266. Harrison CB, Kaplan GW, Scherz HC, et al. Microvascular autotransplantation of the intra-abdominal testis. *J Urol.* 1990 Aug;144(2 Pt 2):506-7; discussion 512-3. X-4, X-5, X-6.
267. Hassan ME and Mustafawi A. Laparoscopic management of impalpable testis in children, new classification, lessons learned, and rare anomalies. *J Laparoendosc Adv Surg Tech A.* 2010 Apr;20(3):265-9. X-4, X-5, X-6.
268. Hauffa BP. Why early surgery may not be enough: the search for new therapeutic strategies in cryptorchidism. *Klin Padiatr.* 2008 Sep-Oct;220(5):279-80. X-1.
269. Hauser R, Lessing JB, Samuel D, et al. Management of bilateral nonpalpable testes: laparoscopic diagnosis and orchidectomy. *Int J Androl.* 1994 Apr;17(2):74-7. X-4, X-5, X-6.
270. Hay SA. Collateral circulation after spermatic vessel ligation for abdominal testis and its impact on staged laparoscopically assisted orchiopexy. *J Laparoendosc Adv Surg Tech A.* 2007 Feb;17(1):124-7. X-4, X-5, X-6.
271. Hay SA, Soliman HA, Abdel Rahman AH, et al. Laparoscopic classification and treatment of the impalpable testis. *Pediatr Surg Int.* 1999;15(8):570-2. X-4, X-5, X-6, X-8.

272. Hayashi Y, Mogami T, Sasaki S, et al. Transinguinal laparoscopy for nonpalpable testis. *Int J Urol*. 1996 Jul;3(4):274-7. X-4, X-5, X-6.
273. Hazebroek FW and Molenaar JC. The management of the impalpable testis by surgery alone. *J Urol*. 1992 Aug;148(2 Pt 2):629-31. X-5, X-6, X-8.
274. He D, Lin T, Wei G, et al. Laparoscopic orchiopexy for treating inguinal canalicular palpable undescended testis. *J Endourol*. 2008 Aug;22(8):1745-9. X-4, X-5, X-6.
275. Heath AL, Man DW and Eckstein HB. Epididymal abnormalities associated with maldescent of the testis. *J Pediatr Surg*. 1984 Feb;19(1):47-9. X-4, X-5, X-6, X-7.
276. Hederstrom E, Forsberg L and Kullendorff CM. Ultrasonography of the undescended testis. *Acta Radiol Diagn (Stockh)*. 1985 Jul-Aug;26(4):453-6. X-10.
277. Hedinger E. Histopathology of undescended testes. *Eur J Pediatr*. 1982 Dec;139(4):266-71. X-1, X-5, X-6, X-7.
278. Heiskanen P, Billig H, Toppari J, et al. Apoptotic cell death in the normal and cryptorchid human testis: the effect of human chorionic gonadotropin on testicular cell survival. *Pediatr Res*. 1996 Aug;40(2):351-6. X-5, X-6, X-7.
279. Heiss KF and Shandling B. Laparoscopy for the impalpable testes: experience with 53 testes. *J Pediatr Surg*. 1992 Feb;27(2):175-8; discussion 179. X-4, X-5, X-6.
280. Hemingway AP, Williams G and Allison DJ. Testicular venography in the localization of undescended testes. An analysis of seventeen patients. *Ann Radiol (Paris)*. 1986;29(2):223-5. X-2.
281. Herrinton LJ, Zhao W and Husson G. Management of cryptorchism and risk of testicular cancer. *Am J Epidemiol*. 2003 Apr 1;157(7):602-5. X-5, X-6, X-8.
282. Herzog B, Hadziselimovic F and Strebel C. Primary and secondary testicular atrophy. *Eur J Pediatr*. 1987;146 Suppl 2:S53-5. X-1, X-4, X-5, X-6.
283. Herzog B, Rosslein R and Hadziselimovic F. The role of the processus vaginalis in cryptorchidism. Does a patent processus vaginalis have a prognostic importance for predicting subsequent fertility? *Eur J Pediatr*. 1993;152 Suppl 2:S15-6. X-5, X-6, X-7.
284. Herzog B, Steigert M and Hadziselimovic F. Is a testis located at the superficial inguinal pouch (Denis Browne pouch) comparable to a true cryptorchid testis? *J Urol*. 1992 Aug;148(2 Pt 2):622-3. X-4, X-5, X-6, X-7.
285. Heyns CF. The gubernaculum during testicular descent in the human fetus. *J Anat*. 1987 Aug;153:93-112. X-5, X-6, X-7.
286. Hezmall HP and Lipshultz LI. Cryptorchidism and infertility. *Urol Clin North Am*. 1982 Oct;9(3):361-9. X-1.
287. Hinman F, Jr. Alternatives to orchiopexy. *J Urol*. 1980 Apr;123(4):548-51. X-1.
288. Hinman F, Jr. Management of the intra-abdominal testis. *Eur J Pediatr*. 1987;146 Suppl 2:S49-50. X-1.
289. Hirsch HJ, Eldar-Geva T, Benarroch F, et al. Primary testicular dysfunction is a major contributor to abnormal pubertal development in males with Prader-Willi syndrome. *J Clin Endocrinol Metab*. 2009 Jul;94(7):2262-8. X-5, X-6, X-7.
290. Hjertkvist M, Damber JE and Bergh A. Cryptorchidism: a registry based study in Sweden on some factors of possible aetiological importance. *J Epidemiol Community Health*. 1989 Dec;43(4):324-9. X-5, X-6, X-7.
291. Hjertkvist M, Lackgren G, Ploen L, et al. Does HCG treatment induce inflammation-like changes in undescended testes in boys? *J Pediatr Surg*. 1993 Feb;28(2):254-8. X-5, X-6, X-7, X-8.
292. Hocht B. LH-RH treatment for cryptorchidism. Randomized study and 10-year follow-up results. *Eur J Pediatr*. 1987;146 Suppl 2:S44-6. X-10.
293. Hoekstra HJ, Wobbes T, Sleyfer DT, et al. Bilateral primary germ cell tumors of testis. *Urology*. 1982 Feb;19(2):152-4. X-5, X-6, X-7.
294. Holcomb GW, 3rd. Laparoscopic evaluation for a contralateral inguinal hernia or a nonpalpable testis. *Pediatr Ann*. 1993 Nov;22(11):678-84. X-5, X-6, X-7, X-8.
295. Holcomb GW, 3rd, Brock JW, 3rd, Neblett WW, 3rd, et al. Laparoscopy for the nonpalpable testis. *Am Surg*. 1994 Feb;60(2):143-7. X-5, X-6, X-7, X-8.
296. Hoorweg-Nijman JJ, Havers HM and Delemarre-van de Waal HA. Effect of human chorionic gonadotrophin (hCG)/follicle-stimulating hormone treatment versus hCG treatment alone on testicular descent: a double-blind placebo-controlled study. *Eur J Endocrinol*. 1994 Jan;130(1):60-4. X-8.
297. Horasanli K, Miroglu C, Tanriverdi O, et al. Single stage Fowler-Stephens orchidopexy: a preferred alternative in the treatment of nonpalpable testes. *Pediatr Surg Int*. 2006 Sep;22(9):759-61. X-4, X-5, X-6.
298. Hornak M, Pauer M, Bardos A, Jr., et al. The incidence of carcinoma in situ in postpubertal undescended testis. *Int Urol Nephrol*. 1987;19(3):321-5. X-4, X-5, X-6, X-7.
299. Hosie S, Loff S, Witt K, et al. Is there a correlation between organochlorine compounds and undescended testes? *Eur J Pediatr Surg*. 2000 Oct;10(5):304-9. X-5, X-6, X-7.
300. Hosie S, Wessel L and Waag KL. Could testicular descent in humans be promoted by direct androgen stimulation of the gubernaculum testis? *Eur J Pediatr Surg*. 1999 Feb;9(1):37-41. X-5, X-6, X-7, X-8.
301. Howard ER and Hedges AR. Diagnosis and surgical treatment of the maldescended testis. *Br J Hosp Med*. 1986 Apr;35(4):260-2. X-1, X-4, X-5, X-6.
302. Hrebinko RL and Bellinger MF. The limited role of imaging techniques in managing children with undescended testes. *J Urol*. 1993 Aug;150(2 Pt 1):458-60. X-8.

303. Hsieh JT and Huang TS. A study on cryptorchidism. *Taiwan Yi Xue Hui Za Zhi*. 1985 Aug;84(8):953-9. X-5, X-6, X-7.
304. Hsieh MH, Bayne A, Cisek LJ, et al. Bladder injuries during laparoscopic orchiopexy: incidence and lessons learned. *J Urol*. 2009 Jul;182(1):280-4; discussion 284-5. X-4, X-5, X-6, X-7.
305. Hsieh MH, Roth DR and Meng MV. Economic analysis of infant vs postpubertal orchiopexy to prevent testicular cancer. *Urology*. 2009 Apr;73(4):776-81. X-5, X-6, X-7, X-8.
306. Huff DS, Fenig DM, Canning DA, et al. Abnormal germ cell development in cryptorchidism. *Horm Res*. 2001;55(1):11-7. X-5, X-6, X-7.
307. Huff DS, Hadziselimovic F, Duckett JW, et al. Germ cell counts in semithin sections of biopsies of 115 unilaterally cryptorchid testes. The experience from the Children's Hospital of Philadelphia. *Eur J Pediatr*. 1987;146 Suppl 2:S25-7. X-5, X-6, X-7.
308. Huff DS, Snyder HM, 3rd, Hadziselimovic F, et al. An absent testis is associated with contralateral testicular hypertrophy. *J Urol*. 1992 Aug;148(2 Pt 2):627-8. X-4, X-5, X-6, X-7.
309. Huff DS, Snyder HM, 3rd, Rusnack SL, et al. Hormonal therapy for the subfertility of cryptorchidism. *Horm Res*. 2001;55(1):38-40. X-4, X-5, X-6.
310. Humke U, Siemer S, Bonnet L, et al. Pediatric laparoscopy for nonpalpable testes with new miniaturized instruments. *J Endourol*. 1998 Oct;12(5):445-50. X-4, X-5, X-6.
311. Hunt JB, Witherington R and Smith AM. The midline preperitoneal approach to orchiopexy. *Am Surg*. 1981 Apr;47(4):184-9. X-4, X-5, X-6.
312. Hurwitz RS and Kaptein JS. How well does contralateral testis hypertrophy predict the absence of the nonpalpable testis? *J Urol*. 2001 Feb;165(2):588-92. X-5, X-6, X-7.
313. Hussain Taqvi SR, Akhtar J, Batool T, et al. Correlation of the size of undescended testis with its locations in various age groups. *J Coll Physicians Surg Pak*. 2006 Sep;16(9):594-7. X-4, X-5, X-6, X-7.
314. Hutcheson JC, Cooper CS and Snyder HM, 3rd. The anatomical approach to inguinal orchiopexy. *J Urol*. 2000 Nov;164(5):1702-4. X-1.
315. Hvistendahl GM and Poulsen EU. Laparoscopy for the impalpable testes: experience with 80 intra-abdominal testes. *J Pediatr Urol*. 2009 Oct;5(5):389-92. X-5, X-6, X-8.
316. Hwang AH, Hwang MM, Xie HW, et al. Access to urologic care for children in California: Medicaid versus private insurance. *Urology*. 2005 Jul;66(1):170-3. X-5, X-6, X-7.
317. Illig R, Bucher H and Prader A. Success, relapse and failure after intranasal LHRH treatment of cryptorchidism in 55 prepubertal boys. *Eur J Pediatr*. 1980 Mar;133(2):147-50. X-4, X-5, X-6.
318. Illig R, Torresani T, Bucher H, et al. Effect of intranasal LHRH therapy on plasma LH, FSH and testosterone, and relation to clinical results in prepubertal boys with cryptorchidism. *Clin Endocrinol (Oxf)*. 1980 Jan;12(1):91-7. X-10.
319. Inan M, Aydinler CY, Tokuc B, et al. Prevalence of cryptorchidism, retractile testis and orchiopexy in school children. *Urol Int*. 2008;80(2):166-71. X-5, X-6, X-7.
320. Irkilata HC, Dayanc M, Kibar Y, et al. Effect of scrotal incision orchiopexy on serum inhibin B levels and comparison with classic inguinal orchiopexy. *Urology*. 2008 Sep;72(3):525-9. X-4, X-5, X-6.
321. Irkilata HC, Dayanc M, Yildirim I, et al. Low sperm recovery from the undescended testis with testicular sperm extraction in postpubertal cryptorchids: preliminary report. *Andrologia*. 2005 Jun;37(2-3):65-8. X-4, X-5, X-6, X-7.
322. Irkilata HC, Yildirim I, Onguru O, et al. The influence of orchiopexy on serum inhibin B level: relationship with histology. *J Urol*. 2004 Dec;172(6 Pt 1):2402-5; discussion 2405. X-4, X-5, X-6.
323. Ismail K, Ashour M, El-Afifi M, et al. Laparoscopy in the management of impalpable testis: series of 64 cases. *World J Surg*. 2009 Jul;33(7):1514-9. X-10.
324. Ito H, Kataumi Z, Yanagi S, et al. Changes in the volume and histology of retractile testes in prepubertal boys. *Int J Androl*. 1986 Jun;9(3):161-9. X-5, X-6, X-7.
325. Iyer KR, Kumar V, Huddart SN, et al. The scrotal approach. *Pediatric Surgery International*. 1995;10 (1):58-60. X-4, X-5, X-6, X-7.
326. Jackson MB. The epidemiology of cryptorchidism. John Radcliffe Hospital Cryptorchidism Research Group. *Horm Res*. 1988;30(4-5):153-6. X-5, X-6, X-7.
327. Jackson MB, Gough MH and Dudley NE. Anatomical findings at orchiopexy. *Br J Urol*. 1987 Jun;59(6):568-71. X-4, X-5, X-6.
328. Jackson MB and Swerdlow AJ. Seasonal variations in cryptorchidism. *J Epidemiol Community Health*. 1986 Sep;40(3):210-3. X-5, X-6, X-7.
329. Jallouli M, Rebai T, Abid N, et al. Neoadjuvant gonadotropin-releasing hormone therapy before surgery and effect on fertility index in unilateral undescended testes: a prospective randomized trial. *Urology*. 2009 Jun;73(6):1251-4. X-10.
330. Janus C and Martin A. MRI of the male pelvis: Current applications. *Applied Radiology*. 1989;18 (10):36-39. X-1.

331. Jarow JP, Berkovitz GD, Migeon CJ, et al. Elevation of serum gonadotropins establishes the diagnosis of anorchism in prepubertal boys with bilateral cryptorchidism. *J Urol*. 1986 Jul;136(1 Pt 2):277-9. X-4, X-5, X-6, X-8.
332. Jawad AJ. High scrotal orchidopexy for palpable maldescended testes. *Br J Urol*. 1997 Aug;80(2):331-3. X-4, X-5, X-6, X-8.
333. Jawad AJ. Scroto-peritoneal port for laparoscopic orchidopexy. *Pediatr Surg Int*. 1998 Jul;13(5-6):460-1. X-4, X-5, X-6.
334. Job JC, Canlorbe P, Garagorri JM, et al. Hormonal therapy of cryptorchidism with human chorionic gonadotropin(HCG). *Urol Clin North Am*. 1982 Oct;9(3):405-11. X-1, X-4, X-5, X-6.
335. Job JC, Toublanc JE, Chaussain JL, et al. Endocrine and immunological findings in cryptorchid infants. *Horm Res*. 1988;30(4-5):167-72. X-1, X-5, X-6, X-7.
336. Job JC, Toublanc JE, Chaussain JL, et al. The pituitary-gonadal axis in cryptorchid infants and children. *Eur J Pediatr*. 1987;146 Suppl 2:S2-5. X-1.
337. Johansen TE. Anatomy of the testis and epididymis in cryptorchidism. *Andrologia*. 1987 Sep-Oct;19(5):565-9. X-4, X-5, X-6, X-7.
338. Johansen TE. The anatomy of gubernaculum testis and processus vaginalis in cryptorchidism. *Scand J Urol Nephrol*. 1988;22(2):101-5. X-5, X-6, X-7.
339. Johansen TE. Therapeutic basis in cryptorchidism. A clinical and experimental study. *J Oslo City Hosp*. 1988 Mar-Apr;38(3-4):27-43. X-2.
340. Johansen TE and Larmo A. Ultrasonography in undescended testes. *Acta Radiol*. 1988 Mar-Apr;29(2):159-63. X-8.
341. Jones BJ, Thornhill JA, O'Donnell B, et al. Influence of prior orchiopexy on stage and prognosis of testicular cancer. *Eur Urol*. 1991;19(3):201-3. X-4, X-5, X-6, X-8.
342. Jones C and Kern I. Laparoscopy for the non-palpable testis: a review of twenty-eight patients (1988-90). *Aust N Z J Surg*. 1993 Jun;63(6):451-3. X-4, X-5, X-6.
343. Jordan GH and Winslow BH. Laparoscopic single stage and staged orchiopexy. *J Urol*. 1994 Oct;152(4):1249-52. X-4, X-5, X-6, X-8.
344. Jose B, Perkins PL and Kays H. Seminoma in undescended testes. *J Surg Oncol*. 1984 Apr;25(4):252-4. X-5, X-6, X-7.
345. Josso N, Fekete C, Cachin O, et al. Persistence of Mullerian ducts in male pseudohermaphroditism, and its relationship to cryptorchidism. *Clin Endocrinol (Oxf)*. 1983 Aug;19(2):247-58. X-4, X-5, X-6, X-7.
346. Josso N, Legeai L, Forest MG, et al. An enzyme linked immunoassay for anti-mullerian hormone: a new tool for the evaluation of testicular function in infants and children. *J Clin Endocrinol Metab*. 1990 Jan;70(1):23-7. X-5, X-6, X-7.
347. Jozsa T, Csizy I, Kutasy B, et al. Decreased incidence of appendix testis in cryptorchidism with intraoperative survey. *Urol Int*. 2008;80(3):317-20. X-5, X-6, X-7.
348. Jozsa T, Dienes B, Telek A, et al. Differential expression of androgen and estrogen receptor of appendix testis in patients with descended and undescended testes. *Int J Urol*. 2008 Feb;15(2):171-4. X-5, X-6, X-7.
349. Kaefer M, Diamond D, Hendren WH, et al. The incidence of intersexuality in children with cryptorchidism and hypospadias: stratification based on gonadal palpability and meatal position. *J Urol*. 1999 Sep;162(3 Pt 2):1003-6; discussion 1006-7. X-5, X-6, X-7.
350. Kaleva M, Arsalo A, Louhimo I, et al. Treatment with human chorionic gonadotrophin for cryptorchidism: clinical and histological effects. *Int J Androl*. 1996 Oct;19(5):293-8. X-4.
351. Kamisawa H, Kojima Y, Hayashi Y, et al. Evaluation of preoperative testicular volume in Japanese children with unilateral cryptorchidism. *Int Urol Nephrol*. 2008;40(4):977-81. X-5, X-6, X-7.
352. Kanemoto K, Hayashi Y, Kojima Y, et al. The management of nonpalpable testis with combined groin exploration and subsequent transinguinal laparoscopy. *J Urol*. 2002 Feb;167(2 Pt 1):674-6. X-4, X-5, X-6, X-8.
353. Karaman I, Karaman A, Erdogan D, et al. The transscrotal approach for recurrent and iatrogenic undescended testes. *Eur J Pediatr Surg*. 2010 Jul;20(4):267-9. X-4, X-5, X-6.
354. Karpe B. Prognosis of hormonal treatment of undescended testis related to testicular position at birth. *Pediatric Surgery International*. 1991;6 (3):221-222. X-4, X-5, X-6, X-8.
355. Karplus G, Kleiner O, Newman N, et al. Twelve years of minimally invasive surgery in children and adolescents: a single center experience. *J Laparoendosc Adv Surg Tech A*. 2005 Aug;15(4):419-23. X-4, X-5, X-6, X-7.
356. Kaye JD and Palmer LS. Single setting bilateral laparoscopic orchiopexy for bilateral intra-abdominal testicles. *J Urol*. 2008 Oct;180(4 Suppl):1795-9; discussion 1799. X-4, X-5, X-6, X-8.
357. Kelley BP, Higuera S, Cisek LJ, et al. Combined laparoscopic and microsurgical techniques for testicular autotransplantation: is this still an evolving technique? *J Reconstr Microsurg*. 2010 Oct;26(8):555-8. X-4, X-5, X-6.
358. Kennedy WAn and Snyder HMr. Paediatric andrology: the impact of environmental pollutants. *BJU Int*. 1999 Jan;83(2):195-200. X-1.

359. Khademi M, Seebode JJ and Falla A. Selective spermatic arteriography for localization of an impalpable undescended testis. *Radiology*. 1980 Sep;136(3):627-34. X-2.
360. Khairi A, Shehata S, Al-Azim MA, et al. Hypoplastic gonadal vessels exiting the deep ring during laparoscopy for impalpable testes: when is inguinal exploration necessary? *J Laparoendosc Adv Surg Tech A*. 2009 Feb;19(1):103-6. X-4, X-5, X-6.
361. Khan AR. Open laparoscopic access for primary trocar using modified Hasson's technique. *Saudi Med J*. 2003 May;24 Suppl:S21-4. X-4, X-5, X-6.
362. Khan O, Krausz T and Williams G. Testicular venography in impalpable testis. *Eur Urol*. 1983;9(6):341-2. X-1.
363. Khan O, Williams G, Boley NB, et al. Testicular venography for the localization of the impalpable undescended testis. *Br J Surg*. 1982 Nov;69(11):660. X-8.
364. Khattak ID, Zafar A, Khan IA, et al. Re-do orchidopexy in a general surgical unit-reliability of clinical diagnosis and the outcome of surgery. *J Ayub Med Coll Abbottabad*. 2008 Jul-Sep;20(3):97-9. X-4, X-5, X-6.
365. Khazanchi RK, Saraf R and Shankar G. The hockey stick incision in microvascular autotransplantation of intra-abdominal testis. *Indian Journal of Urology*. 1994;11 (1):40-41. X-1, X-4, X-5, X-6.
366. Kidney DD, Cohen AJ and Seville P. Retractable testis: an incidental CT finding in trauma patients. *AJR Am J Roentgenol*. 1997 May;168(5):1233-4. X-5, X-6, X-7, X-8.
367. Kim GH, Dy LC, Caldemeyer KS, et al. Buschke-Ollendorff syndrome. *Journal of the American Academy of Dermatology*. 2003 01 Apr;48 (4):600-601. X-1.
368. Kim KK. High scrotal incision for scrotal pouch orchiopexy. *Urology*. 1996 Jul;48(1):131-2. X-1, X-4, X-5, X-6.
369. King LR. Undescended testis. *JAMA*. 1996 Sep 18;276(11):856. X-1, X-4, X-5, X-6.
370. Kirk JM, Savage MO, Grant DB, et al. Gonadal function and response to human chorionic and menopausal gonadotrophin therapy in male patients with idiopathic hypogonadotrophic hypogonadism. *Clin Endocrinol (Oxf)*. 1994 Jul;41(1):57-63. X-5, X-6, X-7, X-8.
371. Kirsch AJ, Escala J, Duckett JW, et al. Surgical management of the nonpalpable testis: the Children's Hospital of Philadelphia experience. *J Urol*. 1998 Apr;159(4):1340-3. X-4, X-5, X-6, X-8.
372. Klein EA and Herr HW. Suprapubic approach for bilateral orchiectomy and placement of testicular prostheses. *J Urol*. 1990 Apr;143(4):765-6. X-1.
373. Kleinteich B, Popp W, Daniel P, et al. Excretory urography as a screening method for abnormalities of the upper urinary tract in asymptomatic boys with undescended testicles. *Int Urol Nephrol*. 1981;13(1):77-80. X-5, X-6, X-7.
374. Klidjian AM, Swift PG and Johnstone JM. Luteinising hormone releasing hormone for incomplete descent of the testis. *Arch Dis Child*. 1985 Jun;60(6):568-71. X-8.
375. Koff WJ and Scaletscky R. Malformations of the epididymis in undescended testis. *J Urol*. 1990 Feb;143(2):340-3. X-4, X-5, X-6, X-7.
376. Kogan BA, Hricak H and Tanagho EA. Magnetic resonance imaging in genital anomalies. *J Urol*. 1987 Oct;138(4 Pt 2):1028-30. X-8.
377. Kogan SJ, Gill B, Bennett B, et al. Human monorchism: a clinicopathological study of unilateral absent testes in 65 boys. *J Urol*. 1986 Apr;135(4):758-61. X-5, X-6, X-7.
378. Kogan SJ, Tennenbaum S, Gill B, et al. Efficacy of orchiopexy by patient age 1 year for cryptorchidism. *J Urol*. 1990 Aug;144(2 Pt 2):508-9; discussion 512-3. X-4, X-5, X-6.
379. Kojima Y, Hayashi Y, Mizuno K, et al. Assessment of serum follicle-stimulating hormone level and testicular volume for prediction of paternity potential in pubertal boys who underwent bilateral orchiopexy in childhood. *J Urol*. 2006 Jun;175(6):2290-4. X-4, X-5, X-6.
380. Kokorowski PJ, Routh JC, Graham DA, et al. Variations in timing of surgery among boys who underwent orchidopexy for cryptorchidism. *Pediatrics*. 2010 Sep;126(3):e576-82. X-5, X-6, X-7.
381. Kollin C, Hesser U, Ritzen EM, et al. Testicular growth from birth to two years of age, and the effect of orchidopexy at age nine months: a randomized, controlled study. *Acta Paediatr*. 2006 Mar;95(3):318-24. X-10.
382. Kollin C, Karpe B, Hesser U, et al. Surgical treatment of unilaterally undescended testes: testicular growth after randomization to orchiopexy at age 9 months or 3 years. *J Urol*. 2007 Oct;178(4 Pt 2):1589-93; discussion 1593. X-10.
383. Kolon TF and Miller OF. Comparison of single versus multiple dose regimens for the human chorionic gonadotropin stimulatory test. *J Urol*. 2001 Oct;166(4):1451-4. X-5, X-8.
384. Kostakopoulos A, Sofras F, Kyriakidis A, et al. Preoperative ultrasonography of the undescended testis. *Acta Urol Belg*. 1987;55(1):89-92. X-8.
385. Koyama T, Nonomura K, Ameda K, et al. Laparoscopic evaluation and the management of the nonpalpable testis. *Diagnostic and Therapeutic Endoscopy*. 1997;4 (2):69-74. X-5, X-6, X-7, X-8.
386. Kropp KA and Voeller KK. Cryptorchidism in meningomyelocele. *J Pediatr*. 1981 Jul;99(1):110-3. X-5, X-6, X-7.
387. Ku JH, Kim ME, Lee NK, et al. Testicular volume and masculine identity in men with unilateral cryptorchidism: results of a community-based survey in Korea. *Urol Res*. 2003 Oct;31(5):312-6. X-5, X-6, X-7.
388. Kubini K, Zachmann M, Albers N, et al. Basal inhibin B and the testosterone response to human chorionic gonadotropin correlate in prepubertal boys. *J Clin Endocrinol Metab*. 2000 Jan;85(1):134-8. X-5, X-8.

389. Kucheria R, Sahai A, Sami TA, et al. Laparoscopic management of cryptorchidism in adults. *Eur Urol.* 2005 Sep;48(3):453-7; discussion 457. X-4, X-5, X-6, X-8.
390. Kyriacou V, Mavridou C, Bintoudi A, et al. Pituitary stalk interruption syndrome: The role of MRI and review of the literature. *Neuroradiology Journal.* 2010 October;23 (5):607-612. X-5, X-6, X-7.
391. Labady F, Lepies P and Cinovsky K. On the psychopathology of patients with disorders in the descent of the testis. *Int Urol Nephrol.* 1988;20(6):647-55. X-5, X-6, X-7.
392. Lackgren G. Undescended testis--diagnosis, treatment and fertility. *Scand J Urol Nephrol Suppl.* 1988;110:47-50. X-1.
393. Lackgren G and Berg AA. The effect of hCG-treatment on in vitro metabolism of progesterone by the human undescended pre-pubertal testis. *Int J Androl.* 1983 Oct;6(5):414-22. X-4, X-5, X-6.
394. Lackgren G and Berg AA. In vitro metabolism of progesterone by the human undescended testis. *Int J Androl.* 1983 Oct;6(5):423-32. X-5, X-6, X-7.
395. Lackgren G, Gordeladze JO, Ploen L, et al. Germ cell adenylyl cyclase activity in the human undescended testis and the effect of HCG-treatment. *Arch Androl.* 1984;12(1):97-102. X-5, X-6, X-8.
396. Lackgren G and Ploen L. The influence of human chorionic gonadotrophin (hCG) on the morphology of the prepubertal human undescended testis. *Int J Androl.* 1984 Feb;7(1):39-52. X-4, X-5, X-6, X-8.
397. Lackgren G, Ploen L, Berg AA, et al. Receptors for luteinizing hormone (LH) and follicle stimulating hormone (FSH) in the human undescended testis and the effect of hCG-treatment. *Int J Androl.* 1983 Dec;6(6):520-32. X-4.
398. Lahdes-Vasama TT, Koskimaki JE, Streng TK, et al. Urodynamic findings in men operated on for an undescended testicle. *BJU Int.* 2003 Dec;92(9):972-6. X-4, X-5, X-6, X-7.
399. Lai HS, Duh YC, Tsai WS, et al. Role of thermography in the diagnosis of undescended testes. *Eur Urol.* 1998;33(2):209-13. X-10.
400. Lais A, Caterino S, Talamo M, et al. The gliding testis: minor degree of true undescended testis? *Eur J Pediatr.* 1993;152 Suppl 2:S20-2. X-4, X-5, X-6, X-7.
401. Lakhoo K, Thomas DF and Najmaldin AS. Is inguinal exploration for the impalpable testis an outdated operation? *Br J Urol.* 1996 Mar;77(3):452-4. X-4, X-5, X-6, X-7.
402. Lakshiminarayan G, Jitendra N, Deepak Singh C, et al. A clinical study and management of inguinoscrotal swelling in children. *JMS - Journal of Medical Society.* 2007 Sep;21 (3):143-146. X-1, X-5, X-6, X-7.
403. Lala R, Canavese F, Andreo R, et al. Testicular function of young men treated in childhood for cryptorchidism. *Horm Res.* 2001;55(1):53. X-4.
404. Lala R, De Sanctis C, Canavese F, et al. Early medical and surgical treatment of cryptorchidism: Clinical, anatomic, and histologic findings. *Pediatric Surgery International.* 1992;7 (5):368-371. X-4, X-5, X-6.
405. Lala R, Matarazzo P, Chiabotto P, et al. Combined therapy with LHRH and HCG in cryptorchid infants. *Eur J Pediatr.* 1993;152 Suppl 2:S31-3. X-4.
406. Lala R, Matarazzo P, Chiabotto P, et al. Early hormonal and surgical treatment of cryptorchidism. *J Urol.* 1997 May;157(5):1898-901. X-4.
407. Lamah M, McCaughey ES, Finlay FO, et al. The ascending testis: is late orchidopexy due to failure of screening or late ascent? *Pediatr Surg Int.* 2001 Jul;17(5-6):421-3. X-5, X-6, X-7.
408. Landa HM, Gyls-Morin V, Mattrey RF, et al. Magnetic resonance imaging of the cryptorchid testis. *Eur J Pediatr.* 1987;146 Suppl 2:S16-7. X-8.
409. Lanson Y. Epidemiology of testicular cancers. *Prog Clin Biol Res.* 1985;203:155-9. X-1.
410. Lawson A, Gornall P, Buick RG, et al. Impalpable testis: testicular vessel division in treatment. *Br J Surg.* 1991 Sep;78(9):1111-2. X-4.
411. Lee BW. Hormonal treatment of cryptorchidism. *J Singapore Paediatr Soc.* 1990;32(1-2):23-6. X-1, X-4, X-5, X-6.
412. Lee BW, Tan SH and Goh HH. Gonadotrophin therapy in children with cryptorchidism. *Asian Medical Journal. [Journal].* 1984;27 (10):661-665. X-4, X-5, X-6, X-8.
413. Lee JK and Glazer HS. Computed tomography in the localization of the nonpalpable testis. *Urol Clin North Am.* 1982 Oct;9(3):397-404. X-2.
414. Lee MM, Donahoe PK, Silverman BL, et al. Measurements of serum mullerian inhibiting substance in the evaluation of children with nonpalpable gonads. *N Engl J Med.* 1997 May 22;336(21):1480-6. X-5, X-6, X-7.
415. Lee PA. Consequence of cryptorchidism: relationship to etiology and treatment. *Curr Probl Pediatr.* 1995 Aug;25(7):232-6. X-1.
416. Lee PA. Fertility after cryptorchidism: epidemiology and other outcome studies. *Urology.* 2005 Aug;66(2):427-31. X-1, X-4, X-5, X-6.
417. Lee PA, Bellinger MF and Coughlin MT. Correlations among hormone levels, sperm parameters and paternity in formerly unilaterally cryptorchid men. *J Urol.* 1998 Sep;160(3 Pt 2):1155-7; discussion 1178. X-5, X-6, X-7.
418. Lee PA, Bellinger MF, Songer NJ, et al. An epidemiologic study of paternity after cryptorchidism: initial results. *Eur J Pediatr.* 1993;152 Suppl 2:S25-7. X-4, X-5, X-6, X-7.
419. Lee PA and Coughlin MT. Fertility after bilateral cryptorchidism. Evaluation by paternity, hormone, and semen data. *Horm Res.* 2001;55(1):28-32. X-4, X-5, X-6.

420. Lee PA and Coughlin MT. Leydig cell function after cryptorchidism: evidence of the beneficial result of early surgery. *J Urol.* 2002 Apr;167(4):1824-7. X-4, X-5, X-6.
421. Lee PA and Coughlin MT. The single testis: paternity after presentation as unilateral cryptorchidism. *J Urol.* 2002 Oct;168(4 Pt 2):1680-2; discussion 1682-3. X-4, X-5, X-6.
422. Lee PA, Coughlin MT and Bellinger MF. Paternity and hormone levels after unilateral cryptorchidism: association with pretreatment testicular location. *J Urol.* 2000 Nov;164(5):1697-701. X-4, X-5, X-6.
423. Lee PA, Coughlin MT and Bellinger MF. Inhibin B: comparison with indexes of fertility among formerly cryptorchid and control men. *J Clin Endocrinol Metab.* 2001 Jun;86(6):2576-84. X-4, X-5, X-6, X-8.
424. Lee PA, Coughlin MT and Bellinger MF. No relationship of testicular size at orchiopey with fertility in men who previously had unilateral cryptorchidism. *J Urol.* 2001 Jul;166(1):236-9. X-4, X-5, X-6, X-8.
425. Lee PA, O'Leary LA, Songer NJ, et al. Paternity after cryptorchidism: lack of correlation with age at orchidopexy. *Br J Urol.* 1995 Jun;75(6):704-7. X-4, X-5, X-6.
426. Lee PA, O'Leary LA, Songer NJ, et al. Paternity after unilateral cryptorchidism: a controlled study. *Pediatrics.* 1996 Oct;98(4 Pt 1):676-9. X-4, X-5, X-6.
427. Lee PA, O'Leary LA, Songer NJ, et al. Paternity after bilateral cryptorchidism. A controlled study. *Arch Pediatr Adolesc Med.* 1997 Mar;151(3):260-3. X-4, X-5, X-6.
428. Lenz S, Giwercman A, Skakkebaek NE, et al. Ultrasound in detection of early neoplasia of the testis. *Int J Androl.* 1987 Feb;10(1):187-90. X-5, X-6, X-7.
429. Lenzi A, Gandini L, Lombardo F, et al. Unilateral cryptorchidism corrected in prepubertal age: evaluation of sperm parameters, hormones, and antisperm antibodies in adult age. *Fertil Steril.* 1997 May;67(5):943-8. X-4, X-5, X-6.
430. Leung AKC and Wong AL. A photoessay on pediatric genital lesions. *Consultant.* 1999;39 (7):2021-2030. X-1, X-5, X-6, X-7.
431. Leung MW, Chao NS, Wong BP, et al. Laparoscopic mobilization of testicular vessels: an adjunctive step in orchidopexy for impalpable and redo undescended testis in children. *Pediatr Surg Int.* 2005 Sep;21(9):767-9. X-4, X-5, X-6, X-8.
432. Li JH, Huang TH, Jiang XW, et al. 46, XX male sex reversal syndrome. *Asian J Androl.* 2004 Jun;6(2):165-7. X-1, X-5, X-6, X-7.
433. Lim KT, Casey RG, Lennon F, et al. Cryptorchidism: a general surgical perspective. *Ir J Med Sci.* 2003 Jul-Sep;172(3):139-40. X-5, X-6, X-8.
434. Lima M, Bertozzi M, Ruggeri G, et al. The nonpalpable testis: an experience of 132 consecutive videolaparoscopic explorations in 6 years. *Pediatr Med Chir.* 2002 Jan-Feb;24(1):37-40. X-4, X-5, X-6, X-7.
435. Lindgren BW, Darby EC, Faiella L, et al. Laparoscopic orchiopey: procedure of choice for the nonpalpable testis? *J Urol.* 1998 Jun;159(6):2132-5. X-5, X-6, X-8.
436. Lindgren BW, Franco I, Blick S, et al. Laparoscopic Fowler-Stephens orchiopey for the high abdominal testis. *J Urol.* 1999 Sep;162(3 Pt 2):990-3; discussion 994. X-5, X-6, X-8.
437. Liu CS, Chin TW and Wei CF. Impalpable cryptorchidism--a review of 170 testes. *Zhonghua Yi Xue Za Zhi (Taipei).* 2002 Feb;65(2):63-8. X-10.
438. Lobe TE. The applications of laparoscopy and lasers in pediatric surgery. *Surg Annu.* 1993;25 Pt 1:175-91. X-1.
439. Lojanapiwat B, Soonthornpun S and Wudhikarn S. Preoperative laparoscopy in the management of the nonpalpable testis. *J Med Assoc Thai.* 1999 Nov;82(11):1106-10. X-4, X-5, X-6, X-7.
440. London NJ, Joseph HT and Johnstone JM. Orchidopexy: the effect of changing patterns of referral and treatment on outcome. *Br J Surg.* 1987 Jul;74(7):636-8. X-4, X-5, X-6, X-8.
441. Longui CA, Arnhold IJ, Mendonca BB, et al. Serum inhibin levels before and after gonadotropin stimulation in cryptorchid boys under age 4 years. *J Pediatr Endocrinol Metab.* 1998 Nov-Dec;11(6):687-92. X-5, X-6, X-8.
442. Lorenzo AJ, Samuelson ML, Docimo SG, et al. Cost analysis of laparoscopic versus open orchiopey in the management of unilateral nonpalpable testicles. *J Urol.* 2004 Aug;172(2):712-6. X-1.
443. Lotan G, Klin B, Efrati Y, et al. Laparoscopic evaluation and management of nonpalpable testis in children. *World J Surg.* 2001 Dec;25(12):1542-5. X-4, X-5, X-6, X-8.
444. Lotan G, Klin B and Vinograd I. Laparoscopic-guided second-stage Fowler-Stephens procedure for nonpalpable testis in children. *Pediatric Endosurgery and Innovative Techniques.* 1997;1 (1):43-46. X-4, X-5, X-6, X-8.
445. Lou CC, Lin JN, Tung TC, et al. Anatomical findings of the vanishing testis. *Changgeng Yi Xue Za Zhi.* 1994 Jun;17(2):121-4. X-5, X-6, X-7.
446. Lovegrove C. Hypogonadotropic hypogonadism and abnormal olfactory-bulb development in CHARGE syndrome. *Nature Clinical Practice Endocrinology and Metabolism.* 2006 20 Jan;2 (1):4. X-1, X-5, X-6, X-7.
447. Lowe DH, Brock WA and Kaplan GW. Laparoscopy for localization of nonpalpable testes. *J Urol.* 1984 Apr;131(4):728-9. X-4, X-5, X-6, X-8.
448. Lustig RH, Conte FA, Kogan BA, et al. Ontogeny of gonadotropin secretion in congenital anorchism: sexual dimorphism versus syndrome of gonadal dysgenesis and diagnostic considerations. *J Urol.* 1987 Sep;138(3):587-91. X-5, X-6, X-7, X-8.

449. Lynch DF, Brock WA and Kaplan GW. Orchiopexy: experiences at two centers. *Urology*. 1982 May;19(5):507-9. X-4, X-5, X-6, X-8.
450. Mabogunje OA. Surgery for undescended testes. *East Afr Med J*. 1986 Apr;63(4):251-7. X-4, X-5, X-6, X-8.
451. MacKellar A. Undescended testis: how history and examination may influence treatment. *Aust N Z J Surg*. 1988 Aug;58(8):643-5. X-4, X-5, X-6, X-8.
452. MacMahon RA, O'Brien BM, Aberdeen J, et al. Results of the use of autotransplantation of the intraabdominal testis using microsurgical vascular anastomosis. *J Pediatr Surg*. 1980 Feb;15(1):92-6. X-4, X-5, X-6.
453. Maggio MC, Corsello M, Piccione M, et al. Neonatal presentation of Prader Willi syndrome. Personal records. [Italian, English]. *Minerva Pediatrica*. 2007 Dec;59 (6):817-823. X-5, X-6, X-7.
454. Maghnie M, Valtorta A, Moretta A, et al. Effect of short-term administration of human chorionic gonadotropin on immune functions in cryptorchid children. *European Journal of Pediatrics*. 1991;150 (4):238-241. X-4, X-5, X-6, X-7.
455. Maghnie M, Valtorta A, Moretta A, et al. Effects of short-term administration of human chorionic gonadotropin on immune functions in cryptorchid children. *Eur J Pediatr*. 1991 Feb;150(4):238-41. X-4, X-5, X-6, X-8.
456. Mahmoud AM, Comhaire FH, Abdel-Rahim DE, et al. Conception rates and assisted reproduction in subfertility due to unilateral cryptorchidism. *Andrologia*. 1996 May-Jun;28(3):141-4. X-5, X-6, X-7.
457. Mahmoud AM, Comhaire FH, Vereecken A, et al. Inhibin and steroid response to testicular stimulation with pure FSH (Metrodin) in infertile men with unilateral cryptorchidism. *Andrologia*. 1996 Mar-Apr;28(2):103-8. X-4, X-5, X-6, X-7.
458. Main KM, Toppari J, Suomi AM, et al. Larger testes and higher inhibin B levels in Finnish than in Danish newborn boys. *J Clin Endocrinol Metab*. 2006 Jul;91(7):2732-7. X-5, X-6, X-7.
459. Maizels M, Gomez F and Firlit CF. Surgical correction of the failed orchiopexy. *J Urol*. 1983 Nov;130(5):955-7. X-4, X-5, X-6, X-7.
460. Makedonsky IA. The use of human chorionic gonadotropin (HCG) for penile reconstruction in bladder exstrophy and total epispadias patients. *Eur J Pediatr Surg*. 2006 Dec;16(6):428-31. X-5, X-6, X-7.
461. Malone PS and Guiney EJ. The value of laparoscopy in localising the impalpable undescended testis. *Br J Urol*. 1984 Aug;56(4):429-31. X-5, X-6, X-7, X-8.
462. Mandat KM, Wieczorkiewicz B, Gubala-Kacala M, et al. Semen analysis of patients who had orchidopexy in childhood. *Eur J Pediatr Surg*. 1994 Apr;4(2):94-7. X-4, X-5, X-6,
463. Manson AL, Terhune D, Jordan G, et al. Preoperative laparoscopic localization of the nonpalpable testis. *J Urol*. 1985 Nov;134(5):919-20. X-4, X-5, X-6, X-8.
464. Marcus KA, Sweep CG, van der Burgt I, et al. Impaired Sertoli cell function in males diagnosed with Noonan syndrome. *J Pediatr Endocrinol Metab*. 2008 Nov;21(11):1079-84. X-5, X-6, X-7.
465. Mark SD and Davidson PJ. The role of laparoscopy in evaluation of the impalpable undescended testis. *Aust N Z J Surg*. 1997 Jun;67(6):332-4. X-4, X-5, X-6, X-8.
466. Martin DC. Guest editorial: testis. *J Urol*. 1980 Sep;124(3):388. X-1, X-5, X-6, X-7.
467. Martin DC. Malignancy in the cryptorchid testis. *Urol Clin North Am*. 1982 Oct;9(3):371-6. X-1.
468. Martin JM, Gorayski P, Zwahlen D, et al. Is radiotherapy a good adjuvant strategy for men with a history of cryptorchism and stage I seminoma? *Int J Radiat Oncol Biol Phys*. 2010 Jan 1;76(1):65-70. X-4, X-5, X-6, X-7.
469. Martinetti M, Maghnie M, Salvaneschi L, et al. Immunogenetic and hormonal study of cryptorchidism. *J Clin Endocrinol Metab*. 1992 Jan;74(1):39-42. X-4.
470. Martinova Y, Tzvetkov D and Nikolovska M. Effect of orchiopexy on human testicular ultrastructure. *Acta Chir Hung*. 1991;32(2):153-7. X-4, X-5, X-6, X-7.
471. Marulaiah M, Gilhotra A, Moore L, et al. Testicular and paratesticular pathology in children: a 12-year histopathological review. *World J Surg*. 2010 May;34(5):969-74. X-5, X-6, X-7.
472. Mayr J, Rune G, Spindel S, et al. Course of pubic tubercle-centre of testicle distance in children with and without testicular maldescent. *Eur J Pediatr Surg*. 1993 Feb;3(1):33-6. X-5, X-6, X-7.
473. Mayr J, Rune GM, Holas A, et al. Ascent of the testis in children. *Eur J Pediatr*. 1995 Nov;154(11):893-5. X-4, X-5, X-6, X-7.
474. Mayr JM, Lawrenz K and Berghold A. Undescended testicles: an epidemiological review. *Acta Paediatr*. 1999 Oct;88(10):1089-93. X-4, X-5, X-6,
475. McAleer IM and Kaplan GW. Is routine karyotyping necessary in the evaluation of hypospadias and cryptorchidism? *J Urol*. 2001 Jun;165(6 Pt 1):2029-31; discussion 2031-2. X-5, X-6, X-7.
476. McAleer IM, Packer MG, Kaplan GW, et al. Fertility index analysis in cryptorchidism. *J Urol*. 1995 Apr;153(4):1255-8. X-4, X-5, X-6, X-8.
477. McBride ML, Van den Steen N, Lamb CW, et al. Maternal and gestational factors in cryptorchidism. *Int J Epidemiol*. 1991 Dec;20(4):964-70. X-4, X-5, X-6, X-7.
478. McCabe JE and Kenny SE. Orchidopexy for undescended testis in England: is it evidence based? *J Pediatr Surg*. 2008 Feb;43(2):353-7. X-4, X-5, X-6.
479. McGlynn KA, Graubard BI, Klebanoff MA, et al. Risk factors for cryptorchism among populations at differing risks of testicular cancer. *Int J Epidemiol*. 2006 Jun;35(3):787-95. X-5, X-6, X-7.

480. McKiernan MV, Murphy PD and Johnston JG. Ten-year review of treatment of the undescended testis in the west of Ireland. *Br J Urol*. 1992 Jul;70(1):84-9. X-4, X-5, X-6, X-7.
481. McLachlan RI, Finkel DM, Bremner WJ, et al. Serum inhibin concentrations before and during gonadotropin treatment in men with hypogonadotropic hypogonadism: physiological and clinical implications. *J Clin Endocrinol Metab*. 1990 May;70(5):1414-9. X-5, X-6, X-7.
482. Meakin JL, Keogh EJ and Martin CE. Human anti-luteinizing hormone-releasing hormone antibodies in patients treated with synthetic luteinizing hormone-releasing hormone. *Fertil Steril*. 1985 May;43(5):811-3. X-4, X-5, X-6, X-7.
483. Mehendale VG, Kamdar MS, Shenoy SN, et al. Laparoscopic management of impalpable testes. *Indian Journal of Urology*. 1999;15 (2):137-141. X-4, X-5, X-6, X-8.
484. Meijer RW, Hack WWM and Haasnoot K. Successful treatment of acquired undescended testes with human chorionic gonadotropin. *European Journal of Pediatrics*. 2001;160 (1):66-67. X-4, X-5, X-6, X-8.
485. Merguerian PA, Mevorach RA, Shortliffe LD, et al. Laparoscopy for the evaluation and management of the nonpalpable testicle. *Urology*. 1998 May;51(5A Suppl):3-6. X-5, X-6, X-8.
486. Merksz M and Toth J. Testicular-epididymal fusion abnormality in undescended testis. *Int Urol Nephrol*. 1987;19(2):179-87. X-4, X-5, X-6, X-8.
487. Merry C, Sweeney B and Puri P. The vanishing testis: anatomical and histological findings. *Eur Urol*. 1997;31(1):65-7. X-5, X-6, X-7.
488. Metin A, Kayigil O and Ahmed SI. The efficacy of human chorionic gonadotropin in retractile testis. *Neuro Endocrinol Lett*. 2005 Feb;26(1):39-42. X-4.
489. Michikawa T, Matsufuji H, Araki Y, et al. Does early orchidopexy prevent morphological changes in undescended testes? A perioperative assessment using ultrasonography. *Urol Int*. 2008;81(2):210-4. X-4, X-5, X-6.
490. Mieusset R, Bujan L, Massat G, et al. Clinical and biological characteristics of infertile men with a history of cryptorchidism. *Hum Reprod*. 1995 Mar;10(3):613-9. X-4.
491. Milad MF, Haddad MJ, Zein TA, et al. Laparoscopy for the impalpable testes. Initial experience of one center. *Int Surg*. 1994 Apr-Jun;79(2):163-5. X-4, X-5, X-6.
492. Miller OF, Stock JA, Cilento BG, et al. Prospective evaluation of human chorionic gonadotropin in the differentiation of undescended testes from retractile testes. *J Urol*. 2003 Jun;169(6):2328-31. X-4, X-5, X-6, X-8.
493. Mininberg DT. The epididymis and testicular descent. *Eur J Pediatr*. 1987;146 Suppl 2:S28-30. X-4, X-5, X-6, X-7.
494. Mininberg DT, Chen ME and Witkin SS. Antisperm antibodies in cryptorchid boys. *Eur J Pediatr*. 1993;152 Suppl 2:S23-4. X-4, X-5, X-6, X-7.
495. Mininberg DT and Poppas DP. Cryptorchidism. *Curr Ther Endocrinol Metab*. 1994;5:318-23. X-1.
496. Mirilas P, Mamoulakis C and De Almeida M. Puberty does not induce serum antisperm surface antibodies in patients with previously operated cryptorchidism. *J Urol*. 2003 Dec;170(6 Pt 1):2432-5. X-10.
497. Misra D, Dias R and Kapila L. Scrotal fixation: a different surgical approach in the management of the low undescended testes. *Urology*. 1997 May;49(5):762-5. X-4, X-5, X-6, X-7.
498. Misra M, MacLaughlin DT, Donahoe PK, et al. Measurement of Mullerian inhibiting substance facilitates management of boys with microphallus and cryptorchidism. *J Clin Endocrinol Metab*. 2002 Aug;87(8):3598-602. X-5, X-6, X-7.
499. Miyamoto J, Asanuma H, Nakai H, et al. Mutational analysis of androgen receptor (AR) gene in 46,XY patients with ambiguous genitalia and normal testosterone secretion: Endocrinological characteristics of three patients with AR gene mutations. *Clinical Pediatric Endocrinology*. 2006;15 (4):151-162. X-5, X-6, X-7.
500. Mlay SM and Sayi EN. Undescended testis in paediatric patients at Muhimbili Medical Centre, Dar es Salaam. *East Afr Med J*. 1994 Feb;71(2):135-7. X-5, X-6, X-7.
501. Mohta A. Cryptorchidism: what's new? *Indian Pediatr*. 2004 Oct;41(10):1019-23. X-1.
502. Molenaar JC. Surgical treatment of undescended testes. *Eur J Pediatr*. 1982 Dec;139(4):289-91. X-1.
503. Mollaeian M, Mehrabi V and Elahi B. Significance of epididymal and ductal anomalies associated with undescended testis: study in 652 cases. *Urology*. 1994 Jun;43(6):857-60. X-4, X-5, X-6, X-7.
504. Moller H, Cortes D, Engholm G, et al. Risk of testicular cancer with cryptorchidism and with testicular biopsy: cohort study. *BMJ*. 1998 Sep 12;317(7160):729. X-5, X-6, X-7.
505. Moller H, Prener A and Skakkebaek NE. Testicular cancer, cryptorchidism, inguinal hernia, testicular atrophy, and genital malformations: case-control studies in Denmark. *Cancer Causes Control*. 1996 Mar;7(2):264-74. X-10.
506. Moore RG, Peters CA, Bauer SB, et al. Laparoscopic evaluation of the nonpalpable tests: a prospective assessment of accuracy. *J Urol*. 1994 Mar;151(3):728-31. X-4, X-5, X-6, X-7.
507. Moorhead D and Barnes R. Technique for bilateral orchietomy leaving epididymis. *Urology*. 1981 Sep;18(3):294. X-1.
508. Mortazavi F, Aslanabadi S and Mahnama ST. Urogenital anomalies associated with anorectal malformations. *Pakistan Journal of Medical Sciences*. 2007 Apr;23 (2):172-175. X-5, X-6, X-7.

509. Moul JW and Belman AB. A review of surgical treatment of undescended testes with emphasis on anatomical position. *J Urol.* 1988 Jul;140(1):125-8. X-4, X-5, X-6, X-7.
510. Mouriquand PD. Undescended testes in children: the paediatric urologist's point of view. *Eur J Endocrinol.* 2008 Dec;159 Suppl 1:S83-6. X-1.
511. Muglia V, Tucci S, Jr., Elias J, Jr., et al. Magnetic resonance imaging of scrotal diseases: when it makes the difference. *Urology.* 2002 Mar;59(3):419-23. X-8.
512. Muller J and Skakkebaek NE. Abnormal germ cells in maldescended testes: a study of cell density, nuclear size and deoxyribonucleic acid content in testicular biopsies from 50 boys. *J Urol.* 1984 Apr;131(4):730-3. X-5, X-6, X-7.
513. Munch LC, Wood DP, Lucas BA, et al. Laparoscopy in urologic surgery: modern applications of the cystoscope. *J Ky Med Assoc.* 1993 Mar;91(3):92-8. X-1.
514. Myles LM and Holmes SJ. Human chorionic gonadotrophin and laparoscopy in the treatment of impalpable testes. *J Pediatr Surg.* 1994 Apr;29(4):551-2. X-4, X-5, X-6, X-8.
515. Nagler HM and Hensle TW. Furlow cylinder passer for orchiopexies. *Urology.* 1981 Mar;17(3):277. X-1.
516. Nagler HM and Hensle TW. Furlow cylinder passer for orchiopexies. *Urology.* [Journal]. 1986;28 (5):31. X-1.
517. Nah SA, Giacomello L, Eaton S, et al. Surgical repair of incarcerated inguinal hernia in children: Laparoscopic or open? *European Journal of Pediatric Surgery.* 2011;21 (1):8-11. X-5, X-6, X-7.
518. Najmaldin A. Minimal access surgery in paediatrics. *Arch Dis Child.* 1995 Feb;72(2):107-9. X-1.
519. Nane I, Ziyilan O, Esen T, et al. Primary gonadotropin releasing hormone and adjunctive human chorionic gonadotropin treatment in cryptorchidism: a clinical trial. *Urology.* 1997 Jan;49(1):108-11. X-4, X-5, X-6.
520. Naslund MJ, Gearhart JP and Jeffs RD. Laparoscopy: its selected use in patients with unilateral nonpalpable testis after human chorionic gonadotropin stimulation. *J Urol.* 1989 Jul;142(1):108-10. X-4, X-5, X-6, X-7.
521. Nassar AH. Laparoscopic-assisted orchidopexy: a new approach to the impalpable testis. *J Pediatr Surg.* 1995 Jan;30(1):39-41. X-4, X-5, X-6, X-7.
522. Navarro MA, Rodriguez-Tolra J, Arranz B, et al. Salivary testosterone in cryptorchid pubertal boys: a parameter to assess the gonadal function. *Fertil Steril.* 1989 Jul;52(1):128-31. X-5, X-6, X-7.
523. Navarro MA, Villabona CM, Aguilo F, et al. Salivary testosterone: its application in the follow-up of hypo- and hyper-androgenic states. *J Clin Chem Clin Biochem.* 1987 Oct;25(10):751-2. X-1.
524. Nawaz A, Matta H, Jacobsz A, et al. Unresectable hepatoblastoma: The role of preoperative chemotherapy. *Annals of Saudi Medicine.* 1999;19 (6):553-556. X-5, X-6, X-7.
525. Nguyen MT, Delaney DP and Kolon TF. Gene expression alterations in cryptorchid males using spermatozoal microarray analysis. *Fertil Steril.* 2009 Jul;92(1):182-7. X-4, X-5, X-6, X-7.
526. Nicotina PA, Romeo C, Arena S, et al. Immunohistology of aquaporin-1 and stem cell factor-receptor in human undescended testes. *Pediatr Surg Int.* 2004 Apr;20(4):271-5. X-5, X-6, X-7.
527. Niederberger C. Cryptorchidism, fertility, and cancer. *J Androl.* 2003 Jan-Feb;24(1):19-20. X-1.
528. Niedzielski J, Pisarska K and Przewratil P. The usefulness of testicular atrophy index in the assessment of undescended testicle--preliminary report. *Rocz Akad Med Bialymst.* 2003;48:112-4. X-5, X-6, X-7, X-8.
529. Nikkanen V and Punnonen R. Serum prolactin, FSH, LH and testosterone before and after vasectomy in normal men. *Arch Androl.* 1982 Jun;8(4):311-3. X-5, X-6, X-7.
530. Nistal M and Jimenez-Heffernan JA. Rete testis dysgenesis. A characteristic lesion of undescended testes. *Arch Pathol Lab Med.* 1997 Dec;121(12):1259-64. X-4, X-5, X-6, X-7.
531. Nistal M, Paniagua R and Abaurrea MA. Multi-vacuolated leydig cells in human adult cryptorchid testes. *Andrologia.* 1981 Sep-Oct;13(5):436-9. X-5, X-6, X-7.
532. Nistal M, Paniagua R, Riestra ML, et al. Bilateral prepubertal testicular biopsies predict significance of cryptorchidism-associated mixed testicular atrophy, and allow assessment of fertility. *Am J Surg Pathol.* 2007 Aug;31(8):1269-76. X-5, X-6, X-7.
533. Noble MJ and Wacksman J. Screening excretory urography in patients with cryptorchidism or hypospadias: a survey and review of the literature. *J Urol.* 1980 Jul;124(1):98-100. X-5, X-6, X-7.
534. Noh PH, Cooper CS, Snyder HM, 3rd, et al. Testicular volume does not predict germ cell count in patients with cryptorchidism. *J Urol.* 2000 Feb;163(2):593-6. X-5, X-6, X-7.
535. Nutman A, Freud E, Itzhaky D, et al. High maternal estriol level in pregnancy as a predictor of surgical intervention for undescended testis. *Fertil Steril.* 2005 Jul;84(1):249-52. X-5, X-6, X-7.
536. Oates RD. Strategies for clinicians: Unraveling the genetic basis of severe male factor infertility. *Sexuality, Reproduction and Menopause.* 2011 February;9 (1):25-30. X-1, X-5, X-6, X-7.
537. O'Brien BM. Second Runme Shaw lecture. State of the art of reconstructive microvascular surgery. *Ann Acad Med Singapore.* 1984 Oct;13(4):693-707. X-1.
538. O'Brien BM, Rao VK, MacLeod AM, et al. Microvascular testicular transfer. *Plast Reconstr Surg.* 1983 Jan;71(1):87-91. X-4, X-5, X-6.
539. O'Brien MF, Hegarty PK, Healy C, et al. One-stage Fowler-Stephens orchidopexy for impalpable undescended testis. *Ir J Med Sci.* 2004 Jan-Mar;173(1):18-9. X-4, X-5, X-6, X-7.
540. Odiase V and Whitaker RH. Analysis of cord length obtained during steps of orchiopexy. *Br J Urol.* 1982 Jun;54(3):308-10. X-4, X-5, X-6, X-7.

541. Oesch I and Ransley PG. Unilaterally impalpable testis. *Eur Urol.* 1987;13(5):324-6. X-4, X-5, X-6, X-7.
542. Ofordeme KG, Aslan AR, Nazir TM, et al. Apoptosis and proliferation in human undescended testes. *BJU Int.* 2005 Sep;96(4):634-8. X-4, X-5, X-6, X-8.
543. Oguzkurt P, Oz S and Kayaselcuk F. Ectopic adrenal tissue: An incidental finding during inguinoscrotal operations in children. *Hernia.* 2002;6 (2):62-63. X-5, X-6, X-7.
544. Oh J, Landman J, Evers A, et al. Management of the postpubertal patient with cryptorchidism: an updated analysis. *J Urol.* 2002 Mar;167(3):1329-33. X-1, X-5, X-6, X-7.
545. O'Hali W, Anderson P and Giacomantonio M. Management of impalpable testes: indications for abdominal exploration. *J Pediatr Surg.* 1997 Jun;32(6):918-20. X-5, X-6, X-7, X-8.
546. Okuyama A, Namiki M, Aono T, et al. Improvement of spermatogenesis by hCG and hMG treatment in pubertal boys with history of orchiopexy at early childhood. *Arch Androl.* 1984;12 Suppl:29-33. X-2.
547. Okuyama A, Nishimoto N, Yoshioka T, et al. Gonadal findings in cryptorchid boys with Noonan's phenotype. *Eur Urol.* 1981;7(5):274-7. X-4, X-5, X-6, X-7.
548. Onal B and Kogan BA. Additional benefit of laparoscopy for nonpalpable testes: finding a contralateral patent processus. *Urology.* 2008 Jun;71(6):1059-63. X-4, X-5, X-6, X-7.
549. Osifo DO and Osaigbovo EO. The prevalence, postnatal descent, and complications of undescended testes among children who underwent neonatal circumcision in Benin City, Nigeria. *J Pediatr Surg.* 2009 Apr;44(4):791-6. X-4, X-5, X-6, X-7.
550. Osuna JA, Arata de Bellabarba G, Temponi AF, et al. Cryptorchidism: treatment with human chorionic gonadotropin--a Venezuelan experience. *Arch Androl.* 1997 Nov-Dec;39(3):229-35. X-4.
551. O'Toole S. A potpourri of pediatric urology. *Journal of Pediatric Urology.* 2007 Aug;3 (4):321-322. X-1.
552. Paasch U, Thieme C, Grunewald S, et al. Electronic data base systems support the evaluation of male infertility factors, example cryptorchidism. *Urol Int.* 2004;72(2):154-61. X-4, X-5, X-6, X-7.
553. Palacio MM, Sferco A, Garcia Fernandez AE, et al. Inguinal cordopexy: a simple and effective new technique for securing the testes in reoperative orchiopexy. *J Pediatr Surg.* 1999 Mar;34(3):424-5. X-4, X-5, X-6, X-7.
554. Palmer LS, Gill B and Kogan SJ. Endocrine analysis of childhood monorchism. *J Urol.* 1997 Aug;158(2):594-6. X-5, X-6, X-7.
555. Palmer LS and Rastinehad A. Incidence and concurrent laparoscopic repair of intra-abdominal testis and contralateral patent processus vaginalis. *Urology.* 2008 Aug;72(2):297-9; discussion 299. X-4, X-5, X-6.
556. Papp G and Hoznek A. Clinical effect of cryptorchidism by undescended testicles. *Andrologia.* 1989 Jul-Aug;21(4):391-5. X-5, X-8.
557. Papparella A, Parmeggiani P, Cobellis G, et al. Laparoscopic management of nonpalpable testes: a multicenter study of the Italian Society of Video Surgery in Infancy. *J Pediatr Surg.* 2005 Apr;40(4):696-700. X-4.
558. Papparella A, Romano M, Noviello C, et al. The value of laparoscopy in the management of non-palpable testis. *J Pediatr Urol.* 2010 Dec;6(6):550-4. X-4, X-5, X-6.
559. Papparella A, Zamparelli M, Cobellis G, et al. Laparoscopy for nonpalpable testis: Is inguinal exploration always necessary when the cord structures enter the inguinal ring? *Pediatric Endosurgery and Innovative Techniques.* 1999;3 (1):29-33. X-4, X-5, X-6.
560. Pappis CH, Argianas SA, Bousgas D, et al. Unsuspected urological anomalies in asymptomatic cryptorchid boys. *Pediatr Radiol.* 1988;18(1):51-3. X-4, X-5, X-6, X-7.
561. Parigi GB, Bardoni B, Avoltini V, et al. Is bilateral congenital anorchia genetically determined? *Eur J Pediatr Surg.* 1999 Oct;9(5):312-5. X-5, X-6, X-7.
562. Parkash S, Ramakrishnan K and Bagdi RK. Orchiopexy: trans-septal ipsilateral positioning. *Br J Urol.* 1983 Feb;55(1):79-80. X-4, X-5, X-6.
563. Parker L. Causes of testicular cancer. *Lancet.* 1997 Sep 20;350(9081):827-8. X-1.
564. Parkinson MC, Swerdlow AJ and Pike MC. Carcinoma in situ in boys with cryptorchidism: when can it be detected? *Br J Urol.* 1994 Apr;73(4):431-5. X-4, X-5, X-6, X-7.
565. Parsons JK, Ferrer F and Docimo SG. The low scrotal approach to the ectopic or ascended testicle: prevalence of a patent processus vaginalis. *J Urol.* 2003 May;169(5):1832-3; discussion 1833. X-4, X-5, X-6.
566. Partsch CJ, von Buren E, Brand M, et al. Efficacy of the subcutaneous reformulated triptorelin depot in children with central precocious puberty. *Acta Paediatr.* 1998 Dec;87(12):1240-4. X-5, X-6, X-7.
567. Pasqualini T, Chemes H and Rivarola MA. Testicular testosterone levels during puberty in cryptorchidism. *Clin Endocrinol (Oxf).* 1981 Dec;15(6):545-54. X-4, X-5, X-6, X-7.
568. Passerotti C and Peters CA. Robotic-assisted laparoscopy applied to reconstructive surgeries in children. *World J Urol.* 2006 Jun;24(2):193-7. X-1.
569. Patel RP, Kolon TF, Huff DS, et al. Testicular microlithiasis and antisperm antibodies following testicular biopsy in boys with cryptorchidism. *J Urol.* 2005 Nov;174(5):2008-10; discussion 2010. X-4, X-5, X-6.
570. Patel RP, Kolon TF, Huff DS, et al. Cryptorchid testis histopathology in myelomeningocele patients. *J Pediatr Urol.* 2008 Dec;4(6):434-7. X-4, X-5, X-6, X-7.
571. Patil KK, Duffy PG, Woodhouse CR, et al. Long-term outcome of Fowler-Stephens orchiopexy in boys with prune-belly syndrome. *J Urol.* 2004 Apr;171(4):1666-9. X-2.

572. Peddle JF. Removal of an intra-abdominal testis in the dog. *Mod Vet Pract.* 1981 Mar;62(3):231-3. X-5, X-6, X-7.
573. Pekkafali MZ, Sahin C, Ilbey YO, et al. Comparison of ultrasonographic and laparoscopic findings in adult nonpalpable testes cases. *Eur Urol.* 2003 Jul;44(1):124-7. X-2.
574. Pellerin D. Cryptorchidism and surgery. *Prog Clin Biol Res.* 1985;203:215-20. X-5, X-6, X-7.
575. Peloquin F, Kiruluta G and Quiros E. Management of an impalpable testis: the role of laparoscopy. *Can J Surg.* 1991 Dec;34(6):587-90. X-10.
576. Penna FJ, Nguyen HT, Passerotti CC, et al. The concordance of testicular anatomic location in bilateral cryptorchidism. *J Pediatr Urol.* 2011 Feb;7(1):52-6. X-4, X-5, X-6.
577. Perovic S and Janic N. Laparoscopy in the diagnosis of non-palpable testes. *Br J Urol.* 1994 Mar;73(3):310-3. X-4, X-5, X-6.
578. Perovic S and Janic N. A short vas deferens limiting successful laparoscopic testicular descent. *Br J Urol.* 1997 Jan;79(1):120-1. X-4, X-5, X-6.
579. Pesce C, d'Agostino S, Costa L, et al. Reoperative orchiopexy: surgical aspects and functional outcome. *Pediatr Surg Int.* 2001;17(1):62-4. X-4, X-5, X-6.
580. Pettersson A, Richiardi L, Nordenskjold A, et al. Age at surgery for undescended testis and risk of testicular cancer. *N Engl J Med.* 2007 May 3;356(18):1835-41. X-4, X-5, X-6.
581. Pike MC, Chilvers C and Peckham MJ. Effect of age at orchidopexy on risk of testicular cancer. *Lancet.* 1986 May 31;1(8492):1246-8. X-4, X-5, X-6, X-7.
582. Pinczowski D, McLaughlin JK, Lackgren G, et al. Occurrence of testicular cancer in patients operated on for cryptorchidism and inguinal hernia. *J Urol.* 1991 Nov;146(5):1291-4. X-4, X-5, X-6, X-7.
583. Pintus C, Coppola R, Talamo M, et al. Laparoscopic approach for nonpalpable abdominal testis. *Surg Laparosc Endosc.* 1997 Apr;7(2):156-8. X-4, X-5, X-6.
584. Pirgon O, Atabek ME, Oran B, et al. Treatment with human chorionic gonadotropin induces left ventricular mass in cryptorchid boys. *J Pediatr Endocrinol Metab.* 2009 May;22(5):449-54. X-5, X-6, X-7, X-8.
585. Pisani E, Austoni E, Trinchieri A, et al. Urological laparoscopy: our preliminary results. *Arch Ital Urol Androl.* 1993 Dec;65(6):687-94. X-4, X-5, X-6, X-7.
586. Piscitelli B, Martone A and Tarallo L. Feasibility of tele-thermography in localizing undescended testes. *Acta Thermographica. [Journal].* 1982;7 (2):50-52. X-8.
587. Pitteloud N, Hayes FJ, Dwyer A, et al. Predictors of outcome of long-term GnRH therapy in men with idiopathic hypogonadotropic hypogonadism. *J Clin Endocrinol Metab.* 2002 Sep;87(9):4128-36. X-5, X-6, X-7.
588. Plotzker ED, Rushton HG, Belman AB, et al. Laparoscopy for nonpalpable testes in childhood: is inguinal exploration also necessary when vas and vessels exit the inguinal ring? *J Urol.* 1992 Aug;148(2 Pt 2):635-7; discussion 638. X-4, X-5, X-6.
589. Poenaru D, Homsy YL, Peloquin F, et al. Laparoscopic management of the impalpable abdominal testis. *Urology.* 1993 Nov;42(5):574-8; discussion 578-9. X-4, X-5, X-6.
590. Pohl HG, Joyce GF, Wise M, et al. Cryptorchidism and hypospadias. *J Urol.* 2007 May;177(5):1646-51. X-5, X-6, X-7.
591. Polascik TJ, Chan-Tack KM, Jeffs RD, et al. Reappraisal of the role of human chorionic gonadotropin in the diagnosis and treatment of the nonpalpable testis: a 10-year experience. *J Urol.* 1996 Aug;156(2 Pt 2):804-6. X-8.
592. Pommerville P, Futter NG, McKay DE, et al. The role of gonadal venography in the management of the adult with non-palpable undescended testis. *Br J Urol.* 1982 Aug;54(4):408-10. X-4, X-5, X-6.
593. Ponchietti R and Grechi G. Fertility in unilateral cryptorchidism: review of 104 cases. *Acta Eur Fertil.* 1986 Jul-Aug;17(4):277-8. X-4, X-5, X-6.
594. Poomthavorn P, Stargatt R and Zacharin M. Psychosexual and psychosocial functions of anorchid young adults. *J Clin Endocrinol Metab.* 2009 Jul;94(7):2502-5. X-5, X-6, X-7.
595. Poppas DP, Lemack GE and Mininberg DT. Laparoscopic orchiopexy: clinical experience and description of technique. *J Urol.* 1996 Feb;155(2):708-11. X-4, X-5, X-6.
596. Poppas DP, Wei JT and Mingin GC. The concealed laparoscopic orchidopexy. *BJU Int.* 2000 Jul;86(1):138-9. X-4, X-5, X-6.
597. Rabinowitz R and Hulbert WC, Jr. Cryptorchidism. *Pediatr Rev.* 1994 Jul;15(7):272-4. X-1.
598. Rabinowitz R and Hulbert WC, Jr. Late presentation of cryptorchidism: the etiology of testicular re-ascent. *J Urol.* 1997 May;157(5):1892-4. X-4, X-5, X-6, X-8.
599. Radmayr C, Corvin S, Studen M, et al. Cryptorchidism, open processus vaginalis, and associated hernia: laparoscopic approach to the internal inguinal ring. *Eur Urol.* 1999 Dec;36(6):631-4. X-4, X-5, X-6, X-8.
600. Raivio T and Dunkel L. Inverse relationship between serum inhibin B and FSH levels in prepubertal boys with cryptorchidism. *Pediatr Res.* 1999 Nov;46(5):496-500. X-4, X-5, X-6, X-7.
601. Raivio T, Palvimo JJ, Dunkel L, et al. Novel assay for determination of androgen bioactivity in human serum. *J Clin Endocrinol Metab.* 2001 Apr;86(4):1539-44. X-5, X-6, X-7.
602. Rajendran R, Sathyanji EK and Pai R. Age of treatment of undescended testis--a study. *J Indian Med Assoc.* 2002 Nov;100(11):662-3, 670. X-4, X-5, X-6.

603. Rajfer J. Technique of orchiopexy. *Urol Clin North Am.* 1982 Oct;9(3):421-7. X-1.
604. Rajfer J, Tauber A, Zinner N, et al. The use of computerized tomography scanning to localize the impalpable testis. *J Urol.* 1983 May;129(5):972-4. X-8.
605. Rangarajan M and Jayakar SM. Laparoscopic orchiectomy for the adult impalpable testis--experiences in a rural teaching hospital. *Surg Endosc.* 2007 Jan;21(1):66-9. X-4, X-5, X-6, X-7.
606. Rao M, Wilkinson J and Benton DC. Screening for undescended testes. *Arch Dis Child.* 1991 Aug;66(8):934-7. X-5, X-6, X-7, X-8.
607. Redman JF. Impalpable testes: observations based on 208 consecutive operations for undescended testes. *J Urol.* 1980 Sep;124(3):379-81. X-4, X-5, X-6, X-7.
608. Redman JF. The ascending (acquired undescended) testis: a phenomenon? *BJU Int.* 2005 Jun;95(9):1165-7. X-1.
609. Reece-Smith H and Moisey CU. The undescended testicle: a continuing failure. *Br Med J (Clin Res Ed).* 1984 Jun 2;288(6431):1653. X-4, X-5, X-6, X-7.
610. Reid S, Renwick A, Seal S, et al. Biallelic BRCA2 mutations are associated with multiple malignancies in childhood including familial Wilms tumour. *Journal of Medical Genetics.* 2005 Feb;42 (2):147-151. X-5, X-6, X-7.
611. Reinberg Y and Gonzalez R. Laparoscopic urological surgery in children. *Semin Urol.* 1992 Aug;10(3):161-3. X-1.
612. Rich MA, Siegel JF and Brock WA. Laparoscopy in children with cryptorchidism. *Children's Hospital Quarterly.* 1993;3 (4):283-285. X-4, X-5, X-6, X-8.
613. Riebel T, Herrmann C, Wit J, et al. Ultrasonographic late results after surgically treated cryptorchidism. *Pediatr Radiol.* 2000 Mar;30(3):151-5. X-4, X-5, X-6.
614. Rijwani A. Picture quiz. *Perinatology.* 2003 Sep;5 (5):239-240. X-1.
615. Ritchey ML and Bloom D. Summary of the urology section. *American Academy of Pediatrics. Pediatrics.* 1995 Jul;96(1 Pt 1):138-43. X-1.
616. Ritchey ML and Bloom DA. Modified dartos pouch orchiopexy. *Urology.* 1995 Jan;45(1):136-8. X-1, X-4, X-5, X-6.
617. Robertson JF, Azmy AF and Cochran W. Assent to ascent of the testis. *Br J Urol.* 1988 Feb;61(2):146-7. X-4, X-5, X-6, X-7.
618. Robertson SA, Munro FD and Mackinlay GA. Two-stage Fowler-Stephens orchidopexy preserving the gubernacular vessels and a purely laparoscopic second stage. *J Laparoendosc Adv Surg Tech A.* 2007 Feb;17(1):101-7. X-4, X-5, X-6.
619. Rockey KE and Cusack TJ. Ultrasound imaging of the scrotum. A pictorial guide to its varied capabilities. *Postgrad Med.* 1987 Jul;82(1):219-27. X-1, X-5, X-6, X-7.
620. Rohatgi M, Gupta DK, Menon PS, et al. Hormonal therapy in undescended testes. *Indian J Pediatr.* 1991 Jan-Feb;58(1):79-83. X-4, X-5, X-6.
621. Romano AA, Dana K, Bakker B, et al. Growth response, near-adult height, and patterns of growth and puberty in patients with Noonan syndrome treated with growth hormone. *Journal of Clinical Endocrinology and Metabolism.* 2009 July;94 (7):2338-2344. X-5, X-6, X-7.
622. Rosello PJ, Novoa R and Milazzo C. Hormonal and testicular volume studies in cryptorchidism. *Bol Asoc Med P R.* 1982 Mar;74(3):66-9. X-4, X-5, X-6.
623. Ross JH, Gill IS and Kay R. Needleoscopic approach to the nonpalpable testis. *Pediatric Endosurgery and Innovative Techniques.* 2000;4 (3):195-200. X-1.
624. Rubin SZ and Gershater R. Testicular venography as an accurate indicator of true cryptorchism. *Can J Surg.* 1981 Jul;24(4):360-2. X-8.
625. Rubin SZ, Mueller DL, Amundson GM, et al. Ultrasonography and the impalpable testis. *Aust N Z J Surg.* 1986 Aug;56(8):609-11. X-2.
626. Rushton Jr HG. This Month in Pediatric Urology. *Journal of Urology.* 2009 November;182 (5):2094-2095. X-1.
627. Rushton Jr HG. This Month in Pediatric Urology. *Journal of Urology.* 2010 May;183 (5):1661-1662. X-1.
628. Rusnack SL, Wu HY, Huff DS, et al. The ascending testis and the testis undescended since birth share the same histopathology. *J Urol.* 2002 Dec;168(6):2590-1. X-4, X-5, X-6, X-7.
629. Ryhanen P, Adamski J, Puhakka K, et al. Postoperative pain relief in children. A comparison between caudal bupivacaine and intramuscular diclofenac sodium. *Anaesthesia.* 1994 Jan;49(1):57-61. X-4, X-5, X-6, X-7.
630. Saggese G, Ghirri P, Gabrielli S, et al. Hormonal therapy for cryptorchidism with a combination of human chorionic gonadotropin and follicle-stimulating hormone. Success and relapse rate. *Am J Dis Child.* 1989 Aug;143(8):980-2. X-4.
631. Saha SK. Cordopexy: a new approach to the undescended testis. A review of 2 to 5-year followup. *J Urol.* 1983 Mar;129(3):561-4. X-4, X-5, X-6.
632. Saha SK. Cordopexy. A new approach to the treatment of undescended testis. *J R Coll Surg Edinb.* 1984 Mar;29(2):105-6. X-4, X-5, X-6.
633. Sahai A, Kucheria R, Challacombe B, et al. Video consent: a pilot study of informed consent in laparoscopic urology and its impact on patient satisfaction. *JLS.* 2006 Jan-Mar;10(1):21-5. X-5, X-6, X-7.

634. Samadi AA, Palmer LS and Franco I. Laparoscopic orchiopexy: report of 203 cases with review of diagnosis, operative technique, and lessons learned. *J Endourol.* 2003 Aug;17(6):365-8. X-4, X-5, X-6.
635. Sangrasi AK, Laghari AA, Abbasi MR, et al. Laparoscopic-assisted management of impalpable testis in patients older than 10 years. *JSLs.* 2010 Apr-Jun;14(2):251-5. X-2.
636. Sarihan H, Sari A, Abes M, et al. Nonpalpable undescending testis. Value of magnetic resonance imaging. *Minerva Urol Nefrol.* 1998 Dec;50(4):233-6. X-2.
637. Sarmah A. Late diagnosis of cryptorchidism: a failure of medical screening? *Arch Dis Child.* 1992 Jun;67(6):728-30. X-4, X-5, X-6, X-7.
638. Sasagawa I, Nakada T, Kubota Y, et al. Gonadal function and testicular histology in Noonan's syndrome with bilateral cryptorchidism. *Arch Androl.* 1994 Mar-Apr;32(2):135-40. X-5, X-6, X-7.
639. Satar N, Bayazit Y and Doran S. Laparoscopy in the management of impalpable testicle. *Acta Chir Belg.* 2005 Nov-Dec;105(6):662-6. X-4, X-5, X-6, X-7.
640. Sathyanarayana S. Phthalates and Children's Health. *Current Problems in Pediatric and Adolescent Health Care.* 2008 Feb;38 (2):34-49. X-1.
641. Saw KC, Eardley I, Dennis MJ, et al. Surgical outcome of orchiopexy. I. Previously unoperated testes. *Br J Urol.* 1992 Jul;70(1):90-4. X-4, X-5, X-6.
642. Scharli AF. The undescended testicle: Viewpoint of the endocrinologist. Editorial comment. *Pediatric Surgery International.* [Journal]. 1987;2 (3):131. X-1.
643. Schindler AM, Diaz P, Cuendet A, et al. Follicle-stimulating hormone. IV. Study of the histology of pubertal cryptorchid and scrotal testes in relation to the secretion of gonadotropins. *Fertil Steril.* 1982 Jun;37(6):828-36. X-5, X-6, X-7.
644. Schleef J, von Bismarck S, Burmucic K, et al. Groin exploration for nonpalpable testes: laparoscopic approach. *J Pediatr Surg.* 2002 Nov;37(11):1552-5. X-4, X-5, X-6, X-7.
645. School M. Classification and diagnosis of undescended testes. *Eur J Pediatr.* 1982 Dec;139(4):253-4. X-1, X-4, X-5, X-6.
646. Schwarz HP, Aebi S and Perisic M. Success and relapse rate after treatment of cryptorchidism with intranasal LHRH. *Acta Paediatr Scand.* 1985 Mar;74(2):274-80. X-4, X-5, X-6, X-7.
647. Schwentner C, Oswald J, Kreczy A, et al. Neoadjuvant gonadotropin-releasing hormone therapy before surgery may improve the fertility index in undescended testes: a prospective randomized trial. *J Urol.* 2005 Mar;173(3):974-7. X-10.
648. Semple D, Findlow D, Aldridge LM, et al. The optimal dose of ketamine for caudal epidural blockade in children. *Anaesthesia.* 1996 Dec;51(12):1170-2. X-4, X-5, X-6, X-7.
649. Shafik A. Extraperitoneal inguinal pelviscopy: diagnostic tool for nonpalpable testes. *J Endourol.* 1994 Feb;8(1):53-5. X-4, X-5, X-6.
650. Shafik A, El-Sibal O and Shafik I. Electro-orchidogram: a non-invasive diagnostic tool in testicular pathologies. *Med Sci Monit.* 2006 Aug;12(8):MT51-5. X-5, X-6, X-7.
651. Shah A. Impalpable testes--is imaging really helpful? *Indian Pediatr.* 2006 Aug;43(8):720-3. X-2.
652. Shames DA. Practical approach to the undescended testicle. *J S C Med Assoc.* 1982 Dec;78(12):664-6. X-1.
653. Shanberg AM. Laparoscopic orchiopexy for intraperitoneal testicles. *West J Med.* 1996 Apr;164(4):343. X-1.
654. Sharifiaghdas F and Beigi FM. Impalpable testis: laparoscopy or inguinal canal exploration? *Scand J Urol Nephrol.* 2008;42(2):154-7. X-4, X-5, X-6.
655. Shenfeld O, Eldar I, Lotan G, et al. Intraoperative irrigation with bupivacaine for analgesia after orchiopexy and herniorrhaphy in children. *J Urol.* 1995 Jan;153(1):185-7. X-4, X-5, X-6, X-7.
656. Shera AH, Baba AA, Gupta SK, et al. Undescended testis: how extensive should the work up be? *Afr J Paediatr Surg.* 2010 May-Aug;7(2):92-5. X-10.
657. Shibata Y, Kojima Y, Mizuno K, et al. Optimal cutoff value of contralateral testicular size for prediction of absent testis in Japanese boys with nonpalpable testis. *Urology.* 2010 Jul;76(1):78-81. X-4, X-5, X-6, X-7.
658. Shima H, Okamoto E, Terakawa T, et al. Is hormonal therapy necessary in prepubertal boys with cryptorchidism? *Int Urol Nephrol.* 1991;23(6):605-9. X-4, X-5, X-6, X-7.
659. Shun a and Puri P. Inguinal hernia in the newborn. A 15-year review. *Pediatric Surgery International.* [Journal]. 1988;3 (2-3):156-157. X-4, X-5, X-6, X-7.
660. Singh A and Singh R. Current status of cryptorchism. *Indian J Pediatr.* 1983 Jan-Feb;50(402):73-7. X-1.
661. Sinisi AA, D'Apuzzo A, Pasquali D, et al. Antisperm antibodies in prepubertal boys treated with chemotherapy for malignant or non-malignant diseases and in boys with genital tract abnormalities. *Int J Androl.* 1997 Feb;20(1):23-8. X-5, X-6, X-7.
662. Sinisi AA, Pasquali D, Papparella A, et al. Antisperm antibodies in cryptorchidism before and after surgery. *J Urol.* 1998 Nov;160(5):1834-7. X-4, X-5, X-6, X-7.
663. Skakkebaek NE, Berthelsen JG and Muller J. Carcinoma-in-situ of the undescended testis. *Urol Clin North Am.* 1982 Oct;9(3):377-85. X-1.
664. Smith PH. Review of the treatment of testicular cancer. *Turkish Journal of Pediatrics.* 1984;26 (1-4):285-289. X-1.

665. Smolko MJ, Kaplan GW and Brock WA. Location and fate of the nonpalpable testis in children. *J Urol*. 1983 Jun;129(6):1204-6. X-5, X-6, X-7, X-8.
666. Snodgrass W, Bush N, Holzer M, et al. Current referral patterns and means to improve accuracy in diagnosis of undescended testis. *Pediatrics*. 2011 Feb;127(2):e382-8. X-10.
667. Somri M, Gaitini LA, Vaida SJ, et al. Effect of ilioinguinal nerve block on the catecholamine plasma levels in orchidopexy: comparison with caudal epidural block. *Paediatr Anaesth*. 2002 Nov;12(9):791-7. X-4, X-5, X-6, X-7.
668. Stec AA, Thomas JC, DeMarco RT, et al. Incidence of testicular ascent in boys with retractile testes. *J Urol*. 2007 Oct;178(4 Pt 2):1722-4; discussion 1724-5. X-5, X-6, X-7.
669. Steckler RE, Zaontz MR, Skoog SJ, et al. Cryptorchidism, pediatricians, and family practitioners: patterns of practice and referral. *J Pediatr*. 1995 Dec;127(6):948-51. X-5, X-6, X-7.
670. Steinhardt GF, Kroovand RL and Perlmutter AD. Orchiopexy: planned 2-stage technique. *J Urol*. 1985 Mar;133(3):434-5. X-4, X-5, X-6.
671. Stephens FD. Fowler-Stephens orchiopexy. *Semin Urol*. 1988 May;6(2):103-6. X-1.
672. Strittmatter T. Testicular autotransplantation - the Monchengladbach experience. *Horm Res*. 2001;55(1):51. X-10.
673. Studnik S, Lewis H and John A. Effectiveness of child health surveillance in lowering age of referral and surgery for undescended testis. *Ambulatory Child Health*. 2001;7(3/4):269-273. X-4, X-5, X-6, X-7.
674. Sudrania OP. Orchiopexy: neo-gubernaculum technique. *Br J Urol*. 1992 May;69(5):550-1. X-1.
675. Swerdlow AJ, Higgins CD and Pike MC. Risk of testicular cancer in cohort of boys with cryptorchidism. *BMJ*. 1997 May 24;314(7093):1507-11. X-5, X-6, X-7.
676. Taha SA, Abdulkader A, Kamal BA, et al. Management of an unusually high postpubertal presentation of cryptorchidism. *Int Surg*. 1990 Apr-Jun;75(2):105-8. X-4, X-5, X-6, X-7.
677. Tak MS, Patnaik R, Zargar AH, et al. Hormonal and surgical management of cryptorchidism. *JK Practitioner*. 1999;6 (2):118-120. X-5, X-6, X-8.
678. Tanaka YO, Mesaki N, Kurosaki Y, et al. Testicular feminization: role of MRI in diagnosing this rare male pseudohermaphroditism. *J Comput Assist Tomogr*. 1998 Nov-Dec;22(6):884-8. X-5, X-6, X-7.
679. Tang PMY, Leung MWY, Chao NSY, et al. Use of laparoscopy in the management of impalpable testis in children. *Hong Kong Journal of Paediatrics*. 2009;14 (3):172-176. X-4, X-5, X-6, X-8.
680. Tapanainen J, Koivisto M, Huhtaniemi I, et al. Effect of gonadotropin-releasing hormone on pituitary-gonadal function of male infants during the first year of life. *Journal of Clinical Endocrinology and Metabolism*. 1982;55(4):689-692. X-5, X-6, X-7, X-8.
681. Tapanainen J, Martikainen H and Dunkel L. Steroidogenic response to a single injection of hCG in pre- and early pubertal cryptorchid boys. *Clinical Endocrinology*. 1983;18 (4):355-362. X-5, X-6, X-7, X-8.
682. Taskinen S, Hovatta O and Wikstrom S. Early treatment of cryptorchidism, semen quality and testicular endocrinology. *J Urol*. 1996 Jul;156(1):82-4. X-4, X-5, X-6, X-7.
683. Taskinen S, Hovatta O and Wikstrom S. Sexual development in patients treated for cryptorchidism. *Scand J Urol Nephrol*. 1997 Aug;31(4):361-4. X-4.
684. Taskinen S, Lehtinen A and Hovatta O. Prostatic volume in young adults after treatment of cryptorchidism in childhood. *Scand J Urol Nephrol*. 2006;40(5):376-9. X-4, X-5, X-6, X-7.
685. Taskinen S and Wikstrom S. Effect of age at operation, location of testis and preoperative hormonal treatment on testicular growth after cryptorchidism. *J Urol*. 1997 Aug;158(2):471-3. X-10.
686. Tekant G, Emir H, Froglu E, et al. Experience with laparoscopy in nonpalpable testis. *Horm Res*. 2001;55(1):52. X-4, X-5, X-6, X-8.
687. Tellaloglu S, Kadioglu A, Kilicaslan I, et al. Cryptorchidism: is orchidopexy always preventive treatment for infertility? *Acta Chir Hung*. 1994;34(1-2):195-201. X-4.
688. Tennenbaum SY, Lerner SE, McAleer IM, et al. Preoperative laparoscopic localization of the nonpalpable testis: a critical analysis of a 10-year experience. *J Urol*. 1994 Mar;151(3):732-4. X-4, X-5, X-6.
689. Thinyu S and Muttarak M. Role of ultrasonography in diagnosis of scrotal disorders: A review of 110 cases. *Biomedical Imaging and Intervention Journal*. 2009;5 (1)(e2). X-5, X-6, X-7, X-8.
690. Thorup J, Cortes D and Nielsen OH. Clinical and histopathologic evaluation of operated maldescended testes after luteinizing hormone-releasing hormone treatment. *Pediatric Surgery International*. 1993;8 (5):419-422. X-4, X-5, X-6, X-7.
691. Thorup J, Cortes D and Nielsen OH. Clinical and histopathological evaluation of operated maldescended testes after LH-RH treatment. *Eur J Pediatr*. 1993;152 Suppl 2:S37. X-1.
692. Thorup J and Corties D. The incidence of maldescended testes in Denmark. *Pediatric Surgery International*. 1990;5 (1):2-5. X-5, X-6, X-7.
693. Thorup J, Kvist N, Larsen P, et al. Clinical results of early and late operative correction of undescended testes. *Br J Urol*. 1984 Jun;56(3):322-5. X-4, X-5, X-6.
694. Tong Q, Zheng L, Tang S, et al. Laparoscopy-assisted orchiopexy for recurrent undescended testes in children. *J Pediatr Surg*. 2009 Apr;44(4):806-10. X-4, X-5, X-6, X-7.

695. Topuzlu Tekant G, Emir H, Eroglu E, et al. Experience with laparoscopy in nonpalpable testis. *Eur J Pediatr Surg.* 2001 Jun;11(3):177-81. X-5, X-6, X-8.
696. Toublanc JE. Hormonal treatment of undescended testis. *Prog Clin Biol Res.* 1985;203:207-11. X-4.
697. Traub A. Induction of ovulation. Gonadotrophin therapy. *Ir J Med Sci.* 1986 Dec;155(12 Suppl):30-6. X-1.
698. Tripathi RP, Jena AN, Gulati P, et al. Undescended testis: evaluation by magnetic resonance imaging. *Indian Pediatr.* 1992 Apr;29(4):433-8. X-10.
699. Tsujihata M, Miyake O, Yoshimura K, et al. Laparoscopic diagnosis and treatment of nonpalpable testis. *Int J Urol.* 2001 Dec;8(12):692-6. X-5, X-6, X-8.
700. Tzvetkova P and Tzvetkov D. Diagnosis of abdominal bilateral cryptorchidism: HCG stimulation test. *Urol Int.* 2001;67(1):46-8. X-5, X-6, X-7, X-8.
701. Tzvetkova P, Tzvetkov D, Kanchev L, et al. hCG stimulation test for diagnosis of androgen deficiency. *Arch Androl.* 1997 Sep-Oct;39(2):163-71. X-10.
702. Uehling D. Cryptorchidism in the Prader-Willi syndrome. *J Urol.* 1980 Jul;124(1):103-4. X-5, X-6, X-7, X-8.
703. Uehling DT and Alter AJ. Current diagnostic modalities for undescended testes. *Wis Med J.* 1984 Mar;83(3):20-2. X-1.
704. Urban MD, Lee PA, Lanes R, et al. HCG stimulation in children with cryptorchidism. *Clin Pediatr (Phila).* 1987 Oct;26(10):512-4. X-4.
705. Varela Cives R, Bautista Casasnovas A, Alonso Martin A, et al. The influence of patency of the vaginal process on the efficacy of hormonal treatment of cryptorchidism. *Eur J Pediatr.* 1996 Nov;155(11):932-6. X-4, X-5, X-6.
706. Varela-Cives R, Bautista-Casasnovas A, Gude F, et al. The predictive value of inguinal herniography for the diagnosis and treatment of cryptorchidism. *J Urol.* 2000 Mar;163(3):964-7. X-4, X-5, X-6.
707. Vegh A. Experiences with Kryptocur in the treatment of cryptorchism. *Acta Chir Hung.* 1987;28(4):257-61. X-4, X-5, X-6.
708. Viguera RM, Reyes G, Osvaldo Cuevas J, et al. The histological effect of the human chorionic gonadotropin and luteinizing hormone-releasing hormone on experimental cryptorchidism in rats. *Proc West Pharmacol Soc.* 1999;42:71-3. X-1, X-5, X-6, X-7.
709. von Eyben F, Krabbe S and Skakkebaek NE. Alpha-foetoprotein and human chorionic gonadotropin in men with maldescended testes. *Br J Cancer.* 1980 Jul;42(1):156-7. X-5, X-6, X-7.
710. Waldschmidt J, Doede T and Vygen I. The results of 9 years of experience with a combined treatment with LH-RH and HCG for cryptorchidism. *Eur J Pediatr.* 1993;152 Suppl 2:S34-6. X-4, X-10.
711. Waldschmidt J, el-Dessouky M and Priefer A. Therapeutic results in cryptorchidism after combination therapy with LH-RH nasal spray and hCG. *Eur J Pediatr.* 1987;146 Suppl 2:S31-4. X-4, X-5, X-6, X-8.
712. Wechsler RJ, Kurtz AB, Needleman L, et al. Cross-sectional imaging of abdominal wall hernias. *American Journal of Roentgenology.* 1989;153 (3):517-521. X-1, X-5, X-6, X-7.
713. Weiss RM, Carter AR and Rosenfield AT. High resolution real-time ultrasonography in the localization of the undescended testis. *J Urol.* 1986 May;135(5):936-8. X-2.
714. Weiss RM and Glickman MG. Localization and management of nonpalpable undescended testes. *Surg Clin North Am.* 1980 Oct;60(5):1253-63. X-2.
715. Weiss RM and Glickman MG. Venography of the undescended testis. *Urol Clin North Am.* 1982 Oct;9(3):387-95. X-2.
716. Whitaker P and De Kock MLS. Laparoscopy for the non-palpable testis - Look before you cut! *South African Journal of Surgery.* 1992;30 (1):26-28. X-5, X-6, X-7.
717. Whitaker RH. The undescended testis - the risk of malignant degeneration. *Monogr Paediatr.* 1981;12:104-8. X-1.
718. Whitaker RH. Neoplasia in cryptorchid men. *Semin Urol.* 1988 May;6(2):107-9. X-1.
719. Williams G and Dharmaraj P. Dissent of the testis. *BMJ.* 2007 Dec 22;335(7633):1287. X-1.
720. Williams HA. Screening for testicular cancer. *Pediatr Nurs.* 1981 Sep-Oct;7(5):38-40. X-1.
721. Wilson-Storey D and MacKinnon AE. The laparoscope and the undescended testis. *J Pediatr Surg.* 1992 Jan;27(1):89-92. X-4, X-5, X-6, X-8.
722. Wilson-Storey D, McGenity K and Dickson JA. Orchidopexy: the younger the better? *J R Coll Surg Edinb.* 1990 Dec;35(6):362-4. X-4, X-5, X-6.
723. Wit JM, Delemarre-van der Waal HA, Faber JA, et al. Intra- and inter-observer variability in the assessment of testicular descent. *Andrologia.* 1987 Sep-Oct;19(5):585-90. X-5, X-6, X-7, X-8.
724. Witherington R. Cryptorchism and approaches to its surgical management. *Surg Clin North Am.* 1984 Apr;64(2):367-84. X-1.
725. Witjes JA, de Vries JD, Lock MT, et al. Use of luteinizing-hormone-releasing hormone nasal spray in the treatment of cryptorchidism: is there still an indication? A clinical study in 78 boys with 103 undescended testicles. *Eur Urol.* 1990;17(3):226-8. X-4.
726. Wolf CK, Maizels M and Furness IPD. The undescended testicle. *Comprehensive Therapy.* 2001;27 (1):11-17. X-1.

727. Wolloch Y, Yahel J, Schachter A, et al. Fertility and sexual development after unilateral orchiopexy for cryptorchidism. *Panminerva Med.* 1983 Apr-Jun;25(2):121-5. X-4, X-5, X-6.
728. Wolverson MK, Houttuin E, Heiberg E, et al. Comparison of computed tomography with high-resolution real-time ultrasound in the localization of the impalpable undescended testis. *Radiology.* 1983 Jan;146(1):133-6. X-2.
729. Wolverson MK, Jagannadharao B, Sundaram M, et al. CT in localization of impalpable cryptorchid testes. *AJR Am J Roentgenol.* 1980 Apr;134(4):725-9. X-8.
730. Woodard JR and Trulock TS. Complications of orchiopexy. *Urol Clin North Am.* 1983 Aug;10(3):537-41. X-1.
731. Wright JE. Impalpable testes: a review of 100 boys. *J Pediatr Surg.* 1986 Feb;21(2):151-3. X-4, X-5, X-6, X-8.
732. Yasumoto R, Nishisaka N, Maekawa T, et al. Subcapsular orchiectomy using ultrasonic surgical aspirator for testicular androgen ablation: A new alternative technique and long-term follow-up. *Minimally Invasive Therapy and Allied Technologies.* 1998 Sep;7 (4):385-387. X-5, X-6, X-7.
733. Yonkov AS and Chatalbashev ND. A 25-year experience with standard orchidopexy in cryptorchism. *Folia Med (Plovdiv).* 2004;46(4):27-31. X-4, X-5, X-6.
734. Youngson GG and Jones PF. Management of the impalpable testis: long-term results of the preperitoneal approach. *J Pediatr Surg.* 1991 May;26(5):618-20. X-4, X-5, X-6.
735. Yucel S, Ziada A, Harrison C, et al. Decision making during laparoscopic orchiopexy for intra-abdominal testes near the internal ring. *J Urol.* 2007 Oct;178(4 Pt 1):1447-50; discussion 1450. X-4, X-5, X-6, X-8.
736. Zabar KJ, Durazi MH and Samiei MR. Cryptorchidism in adolescents and adults: orchiopexy or orchidectomy? *Journal of the Bahrain Medical Society.* 1990;2 (2):65-66. X-2.
737. Zaccara A, Spagnoli A, Capitanucci ML, et al. Impalpable testis and laparoscopy: when the gonad is not visualized. *JSLs.* 2004 Jan-Mar;8(1):39-42. X-4, X-5, X-6.
738. Zadik Z, Blachar Y and Abramovitch D. Growth effect of human chorionic gonadotrophin in 2-8-year-old boys with undescended testes. *Helv Paediatr Acta.* 1984 Aug;39(3):249-54. X-5, X-6, X-7, X-8.
739. Zincke H. Bilateral pelvic lymphadenectomy and radical retropubic prostatectomy for stage C or D1 adenocarcinoma of the prostate: Possible beneficial effect of adjuvant treatment. *NCI Monographs.* 1988;(7):109-115. X-1, X-5, X-6, X-7.
740. Zivkovic D, Bica DG and Hadziselimovic F. Effects of hormonal treatment on the contralateral descended testis in unilateral cryptorchidism. *Journal of Pediatric Urology.* 2006 Oct;2 (5):468-472. X-10.
741. Zivkovic D, Bica DT and Hadziselimovic F. Relationship between adult dark spermatogonia and secretory capacity of Leydig cells in cryptorchidism. *BJU Int.* 2007 Nov;100(5):1147-9; discussion 1149. X-10.
742. Ziylan O, Oktar T, Korgali E, et al. Failed orchiopexy. *Urol Int.* 2004;73(4):313-5. X-4, X-5, X-6.

Appendix D. Evidence Tables

Table D-1. Evidence table template for studies assessing imaging accuracy (KQ1a)

Table D-2. Evidence tables for studies assessing imaging accuracy

Table D-3. Evidence table template for studies assessing hormonal stimulation testing (KQ1b)

Table D-4. Evidence tables for studies assessing hormonal stimulation testing

Table D-5. Evidence table template for studies assessing hormonal or surgical treatment (KQ2-3)

Table D-6. Evidence tables for studies assessing hormonal treatment

Table D-7. Evidence tables for studies assessing surgical treatment

List of Acronyms/Abbreviations/Symbols

LHRH	Luteinizing Hormone-releasing Hormone
GnRH	Gonadotropin-releasing Hormone
hCG	Human Chorionic Gonadotropin
hMG	Human Menopausal Gonadotropin
KQ	Key Questions
PICOTS	Population, Interventions, Comparators, Outcomes, Timing, Settings
UDT	Undescended Testis
CER	Comparative Effectiveness Review
ARHQ	Agency for Healthcare Research and Quality
TEP	Technical Expert Panel
MeSH	Medical Subject Heading
CINAHL	Cumulative Index to Nursing and Allied Health Literature
PPV	Positive Predictive Value
NPV	Negative Predictive Value
OAC	Overall Accuracy Rate
RCT	Randomized Controlled Trials
QUADAS	Quality Assessment of Diagnostic Accuracy Studies Revised
US	Ultrasonography
MRI	Magnetic Resonance Imaging
CT	Computed Tomography
MRA	Magnetic Resonance Angiogram
MRV	Magnetic Resonance Venogram/Venography
MRA/V	Magnetic Resonance Imaging in combination with arteriography/venography
DWI	Diffusion-weighted Imaging
NPT	Non-Palpable Testes
Se	Sensitivity
Sp	Specificity
IU	International Unit
µg	Microgram
mmol	Millimolar
N	Number
IM	Intramuscular
kg	Kilogram
FS	Fowler-Stevens
SOE	Strength of Evidence

Table D-1. Evidence table template for studies assessing imaging accuracy (KQ1a)

Study Description	Imaging Technique & Population	Results	Test Characteristics
Author:	Groups: G1: G2:	Technique (MRI/US/CT): Overall proportion of testes identified:	Presence/absence of testes: Sensitivity: Specificity: PPV: NPV:
Country:	Inclusion criteria: • •	By side: Left: Right: Both:	Correct location: Sensitivity: Specificity: PPV: NPV:
Setting:	Exclusion criteria: • •	By position:	Incorrect location):
Enrollment period: Month YYYY to Month YYYY	N at enrollment (N testes): G1: G2:	Verification technique (laparoscopy, other, etc): Overall proportion of testes identified:	False negatives:
Design:	N at follow-up (N testes): G1: G2: Age: G1: G2: Comorbidities, n (%): Com. A: G1: G2: Com B: G1: G2: Verification method, n (%):	By side: Left: Right: Both: By position:	

Table D-2. Evidence tables for studies assessing imaging accuracy

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Al-Shareef et al., 1996</p> <p>Country: Saudi Arabia</p> <p>Setting: Hospital</p> <p>Enrollment period: December 1992 to November 1994</p> <p>Design: Prospective case series</p>	<p>Groups: Boys evaluated via USG, MRI, and subsequent laparoscopy</p> <p>Inclusion criteria: • Non-palpable undescended testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 19 (24)</p> <p>N at follow-up (N testes): 19 (24)</p> <p>Bilateral testes: N (%): 5 /19 (26.3)</p> <p>Age, range yrs: 1-11</p> <p>Comorbidities: NR</p> <p>Verification method: Laparoscopy</p>	<p>USG: Overall proportion of testes identified, n (%): 4/24 (16.7)</p> <p>By side: NR</p> <p>By position: Intra-abdominal near deep ring: 3/4 (75.0) High intra-abdominal: 1/4 (25.0)</p> <p>MRI: Overall proportion of testes identified, n (%): 7/24 (29.2)</p> <p>By side: NR</p> <p>By position: Intra-abdominal near deep ring: 5/7 (71.4) High intra-abdominal: 1/7 (14.3) Atrophic: 1/7 (14.3)</p> <p>Laparoscopy: Overall proportion of testes identified, n (%): Present: 21/24 (87.5) Absent: 3/24 (12.5)</p> <p>By side: Left: NR Right: NR Both: 10/24 (41.7)</p> <p>By position: Intra-abdominal near deep ring: 15/24 (62.5) High intra-abdominal: 1/24 (4.2) Atrophic: 5/24 (20.8)</p>	<p>Presence / absence of testes:</p> <p>USG: Sensitivity: 0.19 Specificity: 1 PPV: 1 NPV: 0.15 OAC:29.2%</p> <p>MRI : Sensitivity: 0.33 Specificity: 1 PPV: 1 NPV: 0.18 OAC:41.7%</p> <p>Testes Correct location:</p> <p>USG: Intra-abdominal near deep ring: 3/ 15 (20.0) High intra-abdominal 1/1 (100.0)</p> <p>MRI: Intra-abdominal near deep ring: 5/ 15 (33.3) High intra-abdominal 1/1 (100.0) Atrophic: 1/5 (20.0)</p> <p>Incorrect location: USG & MRI: None</p> <p>False negatives: USG missed 12 testes at IA near deep ring and 5 atrophic testes</p> <p>MRI missed 10 testes at IA near deep ring & 4 atrophic testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Cain et al., 1996</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: 1991-1995</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing ultrasound (7.5 MHz) followed by</p> <p>Inclusion criteria: • Nonpalpable testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 64 (74)</p> <p>N at follow-up (N testes): 64 (74) Bilateral testes: 10/64 (15.6%)</p> <p>Age, range yrs (mean): 0.5 –17 (4.5)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method, n (%): Surgical exploration</p>	<p>USG: Overall proportion of testes identified: 48/74 (64.9)</p> <p>By side: NR</p> <p>By position, n (%): Inguinal: 40/48 (83.3) Intra-abdominal: 1/ 48 (2.1) Atrophic: 7/48 (14.6)</p> <p>Surgery: Overall proportion of testes identified: Present: 74 (100) Absent: none</p> <p>By side: NR</p> <p>By position: Inguinal: 42/74 (56.8) Intra-abdominal: 11/74 (14.9) Atrophic: 21/74 (28.4)</p>	<p>Presence/absence of testes: Sensitivity: 0.65 Specificity: NA PPV: 1 NPV: 0 OAC:64.9%</p> <p>Testes Correct location, n (%): Inguinal: 40/42 (95.2) Intra-abdominal: 1/21 (4.8) Atrophic: 7/11 (63.6)</p> <p>Incorrect Location: None</p> <p>False negatives: USG Missed 2 inguinal, 10 IA, & 14 atrophic testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Desireddi et al., 2008</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: November 2003 to November 2005</p> <p>Design: Prospective case series</p>	<p>Groups: G1: MRI (1.5T) G2: MRI with magnetic resonance arteriography/venography (MRA/V)</p> <p>Inclusion criteria: See exclusion criteria</p> <p>Exclusion criteria: • Refusal of imaging or surgery</p> <p>N at enrollment (N testes): G1: 12 (15) G2: 14 (14)</p> <p>N at follow-up (N testes): G1: 12 (15) G2: 14 (14)</p> <p>Bilateral testes: 3/26 boys (11.5%)</p> <p>Age, mean months (range): 28 (3-144)</p> <p>Comorbidities, n (%): Hydrocele : 1 / 26 boys(3.8)</p> <p>Verification method, n (%): surgical exploration:26(100) (inguinal=23, laparoscopic =3)</p>	<p>MRI + MRA/V: Overall proportion of testes identified: 8/14 (57.1)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 4/8 (50.0) Intracanalicular: 2/8 (25.0) Scrotal: 0/8 (0) Testes nubbins: 2/8 (25.0)</p> <p>Surgery: Overall proportion of testes identified: Present: 14/14 (100) Absent: none</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 5/14 (35.7) Intracanalicular: 3/14 (21.4) Scrotal: 1/14 (7.1) Testes nubbins: 5/14 (35.7)</p>	<p>Presence/absence of testes:</p> <p>MRI + MRA/V: (with nubbins) Sensitivity: 0.57 Specificity: NA PPV: 1 NPV: 0 OAC:57%</p> <p>Correct location: Intra-abdominal: 4/5 (80.0) Intracanalicular: 2/3 (66.7) Scrotal: 0/1 (0) Testes nubbins: 2/5 (40.0)</p> <p>Incorrect location: 0</p> <p>False negatives: MRI+MRA/V missed 1 testes each in IA, IC and scrotal positions & also missed 3 nubbins</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Green, 1985</p> <p>Country: US</p> <p>Setting: Hospitals</p> <p>Enrollment period: July 1978 to October 1983</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing CT scan and subsequent spermatic venography if CT scan failed to localize testes</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 26 (30)*</p> <p>N at follow-up (N testes): 26 (30)*</p> <p>Bilateral: 4/26 boys (15.4%)</p> <p>Age, range yrs: 2-18</p> <p>Comorbidities: NR</p> <p>Verification method: Unspecified surgery</p>	<p>CT: Overall proportion of testes identified: 16/30 (53.3)</p> <p>By side: Left : 10/16 (62.5) Right: 6/16 (37.5)</p> <p>By position: n (%) Internal ring: 10/16 (62.5) Inguinal canal: 1/16 (6.3) Intra-abdominal: 5/16 (31.3)</p> <p>Surgery: n (%) Overall proportion of testes identified: Present:28/30 (93.3) Absent: 2/30 (6.7)</p> <p>By side: n (%) Left : 13/28 (46.4) Right: 15/28 (53.6)</p> <p>By position: n (%) Internal ring: 17/28 (60.7) Inguinal canal: 1/28 (3.6) Intra-abdominal: 9/28 (32.1) Canalicular: 1/28 (3.6)</p>	<p>Presence/absence of testes: CT: Sensitivity:0.57 Specificity: 1 PPV:1 NPV: 0.14 OAC: 60%</p> <p>Testes correct location: Internal ring: 10/17 (58.8) Inguinal canal: 1/1 (100.0) Intra-abdominal: 5/9 (55.6)</p> <p>Incorrect location: None</p> <p>False negatives: CT missed 4 Intra-abdominal, 1 canalicular & 7 testes at internal ring</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Guvenc et al., 2005</p> <p>Country: Turkey</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Retrospective case series</p>	<p>Groups: Participants undergoing US examination followed by surgery</p> <p>Inclusion criteria: • Nonpalpable testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 15 (17)</p> <p>N at follow-up (N testes): 15 (17)</p> <p>Bilateral testes: 2/15 boys (13.3%)</p> <p>Age, mean months: 47</p> <p>Comorbidities: NR</p> <p>Verification method: Laparoscopy & Open surgery</p>	<p>US: Overall proportion of testes identified: n (%) 8/17 (47.1)</p> <p>By side: Left: 4/8 (50.0) Right: 2/8 (25.0) Both: 2/8 (25.0)</p> <p>By position: Abdominal atrophic: 1/8 (12.5) Inguinal atrophic: 1/8 (12.5) Abdominal normal: 6/8 (75)</p> <p>Laparoscopy: Overall proportion of testes identified: n (%) Present: 15/17 (88.2) Absent: 2/17 (11.8) (abdominal vanishing, n=2)</p> <p>By side: Left: 8/15 (53.3) Right: 7/15 (46.7)</p> <p>By Position: Abdominal atrophic: 2/15 (13.3) Abdominal normal: 7/15 (46.7) Internal ring: 6/15 (40.0)</p> <p>Surgery: Overall proportion of testes identified: n (%) Present: 13/17 (76.5) Absent: 4/17 (23.5) (abdominal + inguinal vanishing, n=4)</p> <p>By side: Left: 8/17 (47.1) Right: 5/17 (29.4) Both: 4/17 (23.5)</p> <p>By position: Abdominal atrophic: 2/13 (15.4) Abdominal normal: 7/13 (53.9) Inguinal atrophic: 4/13 (30.8)</p>	<p>Presence/absence of testes:</p> <p>USD vs. open surgery: Sensitivity: 0.62 Specificity: 1 PPV: 1 NPV: 0.44 OAC: 70.6%</p> <p>USD vs. Laparoscopy: Sensitivity: 0.40 Specificity: 1 PPV: 1 NPV: 0.18 OAC: 47.1</p> <p>Correct location: USD vs. open surgery: Abdominal atrophic: 1/2 (50.0) Inguinal atrophic: 1/4 (25.0) Abdominal normal: 6/7 (85.7)</p> <p>Incorrect location: None</p> <p>False Negatives: US missed 5 testes identified by surgery (2 abdominal (1 normal, 1 atrophic) & 3 inguinal (atrophic) testes</p> <p>When compared with laparoscopy, US did not identify 7 testes (2 abdominal, 4 IR, 1 abdominal atrophy) and identified 2 normal size testes at IR as 1 inguinal small and another as abdominal normal in size</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Kanemoto et al., 2005</p> <p>Country: Japan</p> <p>Setting: Hospital</p> <p>Enrollment period: 1993 to 2002</p> <p>Design: Prospective case series</p>	<p>Groups: G1: USG (3.5MHz) examination followed by surgery G2: MRI (1.5T) examination followed by surgery</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): G1: 46 (55) G2: 40 (47)</p> <p>N at follow-up (N testes): G1: 46 (55) G2: 40 (47)</p> <p>Age, range yrs: 1-12 Bilateral testes: 9/46 (19.6%)</p> <p>Comorbidities: NR</p> <p>Verification method: Inguinal exploration and laparoscopy</p>	<p>Imaging: USG, MRI: Overall proportion of testes identified: G1: 29/55 (52.7) G2: 28/47 (59.6)</p> <p>By side: NR</p> <p>By position: G1: Inguinal canal / near internal ring: 28/29 (96.6) Scrotum : 1/29 (3.4) G2: Inguinal canal: 19/28 (67.9) Scrotum: 3/28 (10.7) Abdomen: 2/28 (7.1) Lymph node structure: 4/28 (14.3)</p> <p>Surgery: Overall proportion of testes identified: G1: Present: 51/55 (92.7) Absent: 4/55 (7.3) G2: Present: 38/47 (80.9) Absent 9/47 (19.1)</p> <p>By side: NR</p> <p>By position: G1:Inguinal canal/internal ring: 34/55 (61.8) Scrotum: 1/55 (1.8) Abdominal: 3/55 (5.5) Atrophy: 13/55 (23.6) G2: Inguinal canal: 23/47 (48.9) Scrotum: 3/47 (6.4) Abdomen: 2/47 (4.3) Atrophic: 10/47 (21.3)</p>	<p>Presence/absence of testes: G1: Sensitivity: 0.57 Specificity: 1 PPV: 1 NPV: 0.15 OAC: 60%</p> <p>G2: Sensitivity: 0.63 Specificity: 0.56 PPV: 0.86 NPV: 0.26 OAC: 61.7%</p> <p>Testes Correct location: USG: Inguinal canal / near internal ring: 28/34 (82.4) Scrotum : 1/1 (100.0)</p> <p>MRI: Inguinal canal: 19/23 (82.6) Scrotum: 3/3 (100.0) Abdomen: 2/2 (100.0)</p> <p>Incorrect location: MRI identified 4 Lymphnode structure as testes:</p> <p>False Negatives: US missed 3 abdominal & 6 testes in inguinal canal and 13 atrophied testes MRI missed 4 inguinal & 10 atrophic testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Kantarci et al., 2010</p> <p>Country: Turkey</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Retrospective case series</p>	<p>Groups: Participants undergoing MRI (1.5T) examination followed by surgery</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Physical examination findings concordant with the absence of a palpable testis in the scrotum, perineum, or inguinal canal <p>Exclusion criteria:</p> <ul style="list-style-type: none"> No surgery following MRI <p>N at enrollment (N testes): 36 (38)</p> <p>N at follow-up (N testes): 36 (38)</p> <p>Bilateral: 2/36 (5.6%)</p> <p>Age, mean yrs ± SD: 7 ± 1.9</p> <p>Comorbidities: NR</p> <p>Verification method: Laparoscopy within 2 weeks of pre-operative MRI</p>	<p>Technique (MRI): Overall proportion of testes identified: DWI:* Observer 1: 31/38 (81.6) Observer 2: 29/38 (76.3)</p> <p>Conventional MRI: Observer 1: 29/38 (76.3) Observer 2: 30/38 (78.9)</p> <p>MRI+DWI: Observer 1: 31/38 (81.6) Observer 2: 31/38 (81.6)</p> <p>By side: Left: NR Right: NR Both: NR</p> <p>By position: NR</p> <p>Verification technique laparoscopy: Overall proportion of testes identified: Present: 34/38 (89.5) Absent: 4/38 (10.5)</p> <p>By side, n (%): Left: 13/34 (38.2) Right: 21/34 (61.8)</p> <p>By position, n (%) Intracanalicular: 19/38 (50) Low intraabdominal: 11/38 (29) High intraabdominal: 4 / 38 (10.5) (1/ 15 abdominal testes was atrophic: (6.7%))</p>	<p>Presence/absence of testes: Observer 1 / Observer2:</p> <p>DWI: Sensitivity: 0.88 / 0.82 Specificity: 0.75 / 0.75 PPV: 0.97/0.97 NPV: 0.43 / 0.33 OAC: 0.86/0.81</p> <p>Conventional MRI: Sensitivity: 0.85 / 0.85 Specificity: 1 / 0.75 PPV: 1 / 0.97 NPV: 0.44 / 0.44 OAC: 0.86 / 0.84</p> <p>MRI+DWI: Sensitivity: 0.91 / 0.88 Specificity: 1 / 0.75 PPV: 1 / 0.97 NPV: 0.57 / 0.43 OAC: 0.92 / 0.86</p> <p>Testes Correct location: NR</p> <p>Incorrect location: An infected lymph node was misidentified as a testis (1 FP) with all techniques</p> <p>False Negatives: 1/38 (2.6%) intra-abdominal testes was atrophic and missed by both Observers on DWI & conventional MRI</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Kato et al., 2010</p> <p>Country: Japan</p> <p>Setting: Hospital</p> <p>Enrollment period: February 2006 to September 2009</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI (1.5T) examination (T1 & T2 weighted imaging, fat-suppressed T2 weighted imaging, DWI)</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 56 (63)</p> <p>N at follow-up (N testes): 56 (63)</p> <p>Bilateral: 7/56 (12.5%)</p> <p>Age, mean months (range): 24.7 (8-132)</p> <p>Comorbidities: NR</p> <p>Verification method: Laparoscopy or open surgery</p>	<p>Technique (MRI): Overall proportion of testes identified: 45/63 (71.4)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 14/45 (31.1) Intra-canalicular: 13/15 (33.3) Testicular nubbins: 18/45 (40.0)</p> <p>Surgery: Overall proportion of testes identified: Present: 56/63 (88.9) Absent: 7/63 (11.1)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 13/ 63 (20.6) Intra-canalicular: 13/ 63 (20.6) Testicular nubbins: 30/ 63 (47.6)</p>	<p>Presence/absence of testes: Sensitivity: 0.80 Specificity: 1 PPV: 1 NPV: 0.39 OAC: 83%</p> <p>Testes Correct location: Intra-abdominal: 13/13 (100.0) Intra-canalicular: 13/13 (100.0) Testicular nubbins: 18/30 (60.0)</p> <p>Incorrect location: MRI misidentified 1 testicular nubbin as Intra-abdominal testes</p> <p>False negatives: MRI missed 11 testicular nubbins</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Kier et al., 1988</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI (1.5T) followed by surgery</p> <p>Inclusion criteria: • Proof of surgery</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 14 (15)</p> <p>N at follow-up (N testes): 14 (15)</p> <p>Bilateral, n (%): 1 (6.7)</p> <p>Age, range months: 11-60</p> <p>Comorbidities: NR</p> <p>Verification method: Laparoscopy and/or exploration</p>	<p>MRI: Overall proportion of testes identified: Prospectively: 6/15 (40%)</p> <p>By side: Left: NR Right: NR Both: NR</p> <p>By position: Prospectively, n (%): Inguinal: 5/6 (83) External iliac: 1/6 (17)</p> <p>Surgery: Overall proportion of testes identified: Present: 8/15 (53.3) Absent: 7/15 (46.7)</p> <p>By side: NR</p> <p>By position: n (%) Inguinal: 5/15 (33.3) External iliac: 2/15 (13.3) High abdomen: 1/15 (6.7)</p>	<p>Presence/absence of testes:</p> <p>Prospectively: Sensitivity: 0.63 Specificity: 0.86 PPV: 0.83 NPV: 0.67 OAC: 73.3%</p> <p>Testes Correct location: Inguinal: 4/5 (80.0) External iliac: 1/2 (50.0)</p> <p>Incorrect location: identified an absent testis as located at inguinal region.</p> <p>False negatives: Prospectively: MRI did not locate 3 testes (1 inguinal, 1 external iliac, 1 high abdominal)</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Kullendorff et al., 1985</p> <p>Country: Sweden</p> <p>Setting: Hospital</p> <p>Enrollment period: November 1981 to June 1983</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing US (5.0 or 7.5MHz) examination followed by surgery</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 12 (12)</p> <p>N at follow-up (N testes): 12 (11)*</p> <p>Bilateral, n (%): 0</p> <p>Age mean yrs (range): 4 (3-8)</p> <p>Comorbidities: NR</p> <p>Verification method: Unspecified surgery</p>	<p>US: Overall proportion of testes identified: 6/11 (55.0)</p> <p>By side: NR</p> <p>By position: Anulus internus: 1/6 (16.7) Inguinal canal: 2/6 (33.3) Anulus external: 1/6 (16.7) Non-testis like formation: 2/6 (33.3)</p> <p>Surgery: Overall proportion of testes identified: Present: 5/11 (45.5) Absent: 6/11 (54.5)</p> <p>By side: NR</p> <p>By position: Anulus internus: 1/11 (9.1) Inguinal canal: 2/11 (18.2) Anulus external: 1/11 (9.1) Intra-abdominal: 1/11 (9.1)</p>	<p>Presence/absence of testes: Sensitivity: 0.80 Specificity: 0.67 PPV: 0.67 NPV: 0.80 OAC: 0.73</p> <p>Testes Correct location: Anulus internus: 1/1 (100.0) Inguinal canal: 2/2 (100.0) Anulus externa: 1/1 (100.0)</p> <p>Incorrect location: 2 with scar tissues after an earlier operation were identified as non-testis like formations by ultrasound</p> <p>False negatives: Ultrasound did not locate 1 intra-abdominal testis</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Lam et al., 2001</p> <p>Country: China</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI* (1.5T) and magnetic resonance venography (MRV)</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Those presenting with impalpable undescended testes <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 34 (44)</p> <p>N at follow-up (N testes): 34 (44)</p> <p>Bilateral, n (%): 10 (29.4)</p> <p>Age, mean yrs (range): 6.4 (1-16)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method, n (%): Laparoscopy or surgical exploration</p>	<p>MRV: Overall proportion of testes identified: 37/44 (84.1)</p> <p>By side: NR</p> <p>By position: Hypoplastic testis inside (canalicular): 26/37 (70.3) Pelvic skinfold: 2/37 (5.5) Intra-abdominal: 5/37 (13.5) Atrophic testis: 4/37 (10.8)</p> <p>Vanishing testes at scrotum: 5/44 (11.4) Vanishing testes at inguinal canal: 2/44 (4.5)</p> <p>Surgery: Overall proportion of testes identified: Present: 37/44 (84.1) Absent: 7/44 (15.9) (Vanishing testes at scrotum: 5, at inguinal canal: 2)</p> <p>By side: NR</p> <p>By position: Hypoplastic testis inside (canalicular): 26/44 (59.1) Pelvic skinfold: 2/44 (4.5) Intra-abdominal: 5/44 (11.4) Atrophic testis: 4/44 (9.1)</p>	<p>Presence/absence of testes:</p> <p>MRV: Sensitivity: 1 Specificity: 1 PPV: 1 NPV: 1 OAC: 1.00</p> <p>Correct location: MRV correctly located all testes including vanishing testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Lam et al., 1998</p> <p>Country: China</p> <p>Setting: Hospital</p> <p>Enrollment period: August 1996 to January 1997</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI (1.5T) and MRA * examination, followed by surgery</p> <p>Inclusion criteria: • Impalpable testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 14 (17)</p> <p>N at follow-up (N testes): 14 (17)</p> <p>Bilateral, n (%): 3 (21.4)</p> <p>Age, range yrs: 1-16</p> <p>Comorbidities: NR</p> <p>Verification method: Unspecified surgery</p>	<p>MRI: Overall proportion of testes identified: 14/17 (82.4)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 3/14 (21.4) Canalicular: 11/14 (78.6)</p> <p>MRA: Overall proportion of testes identified: 17/17 (100)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 3/17 (17.6) Canalicular: 11/17 (64.7) Atrophic: 3/17 (17.6)</p> <p>Surgery: Overall proportion of testes identified: Present: 17 /17 (100.0) Absent: none</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 3/17 (17.6) Canalicular: 11/17 (64.7) Atrophic: 3/17 (17.6)</p>	<p>Presence/absence of testes: MRI: Sensitivity: 0.82 Specificity: NA PPV: 1 NPV: 0 OAC: 82.0%</p> <p>MRA: Sensitivity: 1 Specificity: NA PPV: 1 NPV: NA OAC: 100 %</p> <p>Correct location: MRI: Intra-abdominal: 3/3 (100.0) Canalicular: 11/11 (100.0)</p> <p>MRA: Correctly located all testes</p> <p>Incorrect location: None</p> <p>False negatives: MRI missed 3 atrophic testes located in the scrotum</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results**	Test Characteristics
<p>Author: Maghnie et al., 1994</p> <p>Country: Italy</p> <p>Setting: Hospital</p> <p>Enrollment period: 1989-1993</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing USG (7.5MHz) and MRI (1.5T), followed by surgery</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 17 (22)</p> <p>N at follow-up (N testes): 17 (21)</p> <p>Bilateral, n (%): 5/17 (29.4)</p> <p>Age, range months: 10-174</p> <p>Comorbidities: Kallmann's syndrome (n=1)</p> <p>Verification method: Unspecified surgery</p>	<p>USG: Overall proportion of testes identified: 13/21 (61.9)</p> <p>By side: Left: 7/13 (53.8) Right: 6/13 (46.2)</p> <p>By position: n (%) Abdominal/ near Internal inguinal ring: 2/13 (15.4) includes 1 atrophic</p> <p>Within inguinal canal: 10/13 (76.9) includes 4 atrophic</p> <p>1/13--- false positive (7.7)</p> <p>MRI: Overall proportion of testes identified: 11/21 (52.3)</p> <p>By side: Left: 5/11 (45.5) Right: 6/11 (54.5)</p> <p>By position: Abdomen: 4/11 (36.4) Inguinal canal: 6/11 (54.5) Atrophy-inguinal 1/11(9.1)</p> <p>Surgery: Overall proportion of testes identified: Present: 16/21 (76.2) Absent: 5/21(23.8)</p> <p>By side: Right: 8/16 (50%) Left: 8/16 (50%)</p> <p>By position: n (%) Abdominal / near internal ring: 4/21 (19.1) Inguinal: 6/21 (28.6) Abdominal atrophic: 2/21(9.5) Inguinal atrophic: 4/21 (19.1)</p>	<p>Presence/absence of testes: USG: Sensitivity: 0.75 Specificity: 0.80 PPV: 0.92 NPV: 0.50 OAC: 76%</p> <p>MRI: Sensitivity: 0.69 Specificity: 1 PPV: 1 NPV: 0.50 OAC: 76%</p> <p>Testes Correct location: USG: Near Internal inguinal ring: 1/4 (25.0) Abdominal atrophic: 1 / 2 (50.0) Within inguinal canal: 6/6 (100.0) Inguinal atrophic: 4/4 (100.0)</p> <p>MRI: Abdominal: 4/4 (100.0) Inguinal canal: 6/6 (100.0) Atrophy-inguinal 1 / 4 (25.0)</p> <p>Incorrect location: USG identified 1 absent testis as present</p> <p>False negatives: US missed 3 abdominal normal & 1 abdominal atrophic testes</p> <p>MRI missed 5 atrophic testes (3 inguinal , 2 abdominal)</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Malone and Guiney, 1985</p> <p>Country: Ireland</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective case series</p>	<p>Groups: Patients undergoing US examination followed y laparoscopy</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 11 (14)</p> <p>N at follow-up (N testes): 11 (14)</p> <p>Bilateral, n (%): 3 (27.3)</p> <p>Age, mean yrs (range): 6 (3-12)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method: Laparoscopy & surgery*</p>	<p>US: Overall proportion of testes identified: 2/14 (14.3)</p> <p>By side: NR</p> <p>By position: Abdominal: 1/2 (50.0) Canalicular: 1/2 (50.0)</p> <p>Laparoscopy & Surgery: Overall proportion of testes identified: Present: 13/14 (92.9) Absent: 1/14 (7.1)</p> <p>By side: NR</p> <p>By position: Abdominal: 7/14 (50.0) Canalicular: 5/14 (35.7) Atrophic: 1/14 (7.1)</p>	<p>Presence/absence of testes: Sensitivity: 0.15 Specificity: 1 PPV: 1 NPV: 0.08 OAC: 21.4 %</p> <p>Correct location: Abdominal: 1/7 (14.3) Canalicular: 1/5 (20.0)</p> <p>Incorrect location: None</p> <p>False negatives: US missed 6 abdominal, 4 canalicular testes & 1 atrophic testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Miyano et al., 1991</p> <p>Country: Japan</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI (1.5T) examination followed by surgery</p> <p>Inclusion criteria: • Impalpable testes not demonstrated by US</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 17 (? 17)</p> <p>N at follow-up (N testes): 17 (? 17)</p> <p>Bilateral, n (%): NR</p> <p>Age, mean yrs (range): 2.7 (1-5.3)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method, n (%): Surgery</p>	<p>Technique (MRI):</p> <p>Overall proportion of testes identified: 9 / 17 (52.9 %)</p> <p>By side: NR</p> <p>By position: Inguinal canal: 8/9 (89%) Abdominal: 1/9 (11%)</p> <p>Verification technique</p> <p>Surgery: Overall proportion of testes identified: Present: 11/17 (64.7) Absent: 6/17 (35.3)</p> <p>By side: NR</p> <p>By position: n (%) Inguinal canal : 10/17 (58.8) Abdominal : 1/17 (5.9)</p>	<p>Presence/absence of testes:</p> <p>Pre-operatively: Sensitivity: 0.82 Specificity: 1 PPV:1 NPV:0.75 OAC:88 %</p> <p>Correct location: n(%) Inguinal canal: 8/10(80.0) Abdominal : 1/1 (100.0)</p> <p>Incorrect location: None</p> <p>False negatives: Pre-operatively, MRI missed 2 testes at inguinal canal</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Nijs et al., 2007</p> <p>Country: Netherlands</p> <p>Setting: Hospital</p> <p>Enrollment period: 7 years (unspecified)</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing USG (5-12 MHz) followed by surgery</p> <p>Inclusion criteria: See exclusion criteria</p> <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Mullerian inhibitory factor deficiency syndrome (implying abnormal testis position) <p>N at enrollment (N testes): 137 (156)</p> <p>N at follow-up (N testes): 135 (152)</p> <p>Bilateral, n (%): 17 (12.6)</p> <p>Age, range: 4 wks – 16.2 yrs</p> <p>Comorbidities, n (%): NR</p> <p>Verification method: Laparoscopy or orchiopexy,</p>	<p>USG: Overall proportion of testes identified: 103/152 (67.8%)</p> <p>By side: NR</p> <p>By position: Abdominal: 16/103 (15.5) Inguinal: 87/103 (84.5)</p> <p>Surgery: Overall proportion of testes identified: Present: 143/152 (94.1) Absent: 9/152 (5.9)</p> <p>By side: Left: 70/152 Right: 48/152</p> <p>By position: Abdominal: 33/152 (21.7) Inguino-scrotal : 86/152 (56.6) Atrophic: 24/152 (15.8) (2=abdominal, 17 inguinal , 5 scrotal)</p>	<p>Presence/absence of testes: Sensitivity: 0.72 Specificity: 1 PPV: 1 NPV: 0.18 OAC: 73.7%</p> <p>Correct location: Abdominal: 16/33 (48.5) Inguinal: 84/86 (97.7)</p> <p>Incorrect location: USG located 3 abdominal testes as inguinal</p> <p>False negatives: USG missed 14 normal abdominal, 2 normal inguinal, 17 inguinal atrophic, 2 abdominal atrophic and 5 scrotal atrophic testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Siemer et al., 2000</p> <p>Country: Germany</p> <p>Setting: Hospital</p> <p>Enrollment period: 1987 to 1997</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing MRI (1.0-1.5T) followed by surgery</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 29 (29)</p> <p>N at follow-up (N testes): 29 (29)</p> <p>Bilateral, n: 0</p> <p>Age, range yrs (mean): 1-15 (4.5)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method: Operative exploration</p>	<p>MRI: Overall proportion of testes identified: 17/29 (58.6)</p> <p>By side: NR</p> <p>By position: Inguinal: 10/17 (58.8) Abdominal: 7/17 (41.2)</p> <p>Surgery: Overall proportion of testes identified: Present: 25/29 (86.2) Absent: 4/29 (13.8)</p> <p>By side: NR</p> <p>By position: Inguinal: 17/29 (58.6) Abdominal: 8/29 (27.6)</p>	<p>Presence/absence of testes: Sensitivity:0.68 Specificity:1 PPV:1 NPV:0.33 OAC: 72.4%</p> <p>Testes Correct location: Inguinal: 10/17 (58.8) Abdominal: 7/8 (87.5)</p> <p>Incorrect location: None</p> <p>False Negatives: MRI did not locate 7 inguinal & 1 abdominal testes</p>

Table D-2. Evidence tables for studies assessing imaging accuracy (continued)

Study Description	Imaging Technique & Population	Results	Test Characteristics
<p>Author: Yeung et al., 1983</p> <p>Country: China</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective case series</p>	<p>Groups: Participants undergoing US (5-10 MHz), Plain MRI and MRA (1.5T) followed by surgery</p> <p>Inclusion criteria: NR</p> <p>Exclusion criteria: NR</p> <p>N at enrollment (N testes): 21 (23)</p> <p>N at follow-up (N testes): 21 (23)</p> <p>Bilateral, n (%): 2 (9.5)</p> <p>Age, range yrs (mean): 1-10 (3.8)</p> <p>Comorbidities, n (%): NR</p> <p>Verification method: Laparoscopy and surgical exploration</p>	<p>USG & MRI: Overall proportion of testes identified: 9/23 (39.1)</p> <p>By side: NR</p> <p>By position: USG: Inguinal: 9/9 (100.0)</p> <p>MRI: Intra-abdominal: 1/9 (11.1) Inguinal: 8/9 (88.9)</p> <p>MRA: Overall proportion of testes identified: 22/23 (95.7)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 4/22 (18.2) Inguinal: 10/22 (45.4) Atrophy: 8/22 (36.4)</p> <p>Verification technique: Overall proportion of testes identified: Present: 22/23 (95.7) Absent: 1/23 (4.3)</p> <p>By side: NR</p> <p>By position: Intra-abdominal: 4/23 (17.4) Inguinal: 10/23 (43.5) Atrophy: 8/23 (34.8)</p>	<p>Presence/absence of testes:</p> <p>USG & MRI: Sensitivity:0.41 Specificity:1 PPV:1 NPV:0.07 OAC: 43.5%</p> <p>MRA: Sensitivity:1 Specificity:1 PPV:1 NPV:1 OAC: 100.0%</p> <p>Testes Correct location:</p> <p>USG: Inguinal: 9/10 (90.0)</p> <p>MRI: Intra-abdominal: 1 / 4 (25%) Inguinal: 8/10 (80.0)</p> <p>MRA: correctly located all the testes (100.0%) Intra-abdominal: 4/4 Inguinal: 10/10 Atrophy: 8/8</p> <p>Incorrect location: None</p> <p>False negatives: USG missed all th4 intra-abdominal, 1 inguinal and all the 8 atrophied testes</p> <p>MRI missed 3 intra-abdominal, 2 inguinal and all the 8 atrophied testes</p>

Table D-3. Evidence table template for studies assessing hormonal stimulation testing (KQ1b)

Study Description	Population Description	Pre-testing Levels	Post-testing Levels
Author:	Groups:	Hormone levels:	Hormone levels:
	G1:	G1:	G1:
	G2:	G2:	G2:
Country:	Inclusion criteria:		Overall proportion with surgery:
	•		G1:
Setting:	•		G2:
	Exclusion criteria:		Proportion with hormone response followed by surgery:
Enrollment period:	•		G1:
Month YYYY to Month YYYY	•		G2:
	N at enrollment (N testes):		Proportion with no hormone response followed by surgery:
Design:	G1:		G1:
	G2:		G2:
	N at follow-up (N testes):		Proportion of testes palpable after testing:
	G1: 123		G1:
	G2:		G2:
	Age:		Confirmation of presence of testes:
	G1:		G1:
	G2:		G2:
	Comorbidities, n (%):		
	Com. A:		
	G1:		
	G2:		
	Com B:		
	G1:		
	G2:		

Table D-4. Evidence tables for studies assessing hormonal stimulation testing

Study Description	Population Description	Pre-testing Levels	Post-testing Levels
<p>Author: Davenport et al., 1995</p> <p>Country: UK</p> <p>Setting: Hospital</p> <p>Enrollment period: 1974 to 1990</p> <p>Design: Prospective cohort</p>	<p>Groups: G1: Participants diagnosed as anorchic following surgical exploration G2: Participants diagnosed with bilateral, intraabdominal testes of normal volume following surgical exploration G3: Participants diagnosed with either unilateral, intraabdominal testes only or with bilateral dysplastic testes following surgical exploration</p> <p>Participants received three doses of IM hCG on successive days. Dosage varied by age: <1 yr : 500 units/dose 1-10 yrs: 1000 units/dose >10 yrs: 1500 units/dose</p> <p>Inclusion criteria: See exclusion criteria</p> <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Children with ambiguous genitalia or intersex • History suggestive of neonatal torsion or trauma <p>N at enrollment (N testes): G1: 8 (0) G2: 14 (28) G3: 9 (NR)</p> <p>N at follow-up (N testes): G1: 8 (0) G2: 14 (28) G3: 9 (NR)</p> <p>Age, median yrs (range): 9 (1-12)</p> <p>Comorbidities, n (%): NR</p>	<p>Hormone levels: Testosterone, basal median value (range): G1: 0.64 (0.5-2) G2: 0.5 (0.3-4.6) G3: 0.7 (0.4-4)</p>	<p>Hormone levels: Testosterone, peak median value (range): G1: 0.7 (0.3-2) G2: 5.1 (1.8-38.9) G3: 1.8 (0.7-21.7)</p> <p>Overall proportion with surgery: 31 (100)</p> <p>Proportion with hormone response followed by surgery: 31 (100)</p> <p>Proportion with no hormone response followed by surgery: NR</p> <p>Proportion of testes palpable after testing: NR</p> <p>Confirmation of presence of testes: NA</p>

Table D-4. Evidence tables for studies assessing hormonal stimulation testing (continued)

Study Description	Population Description	Pre-testing Levels	Post-testing Levels
Author: Merksz et al., 1992 Country: Hungary Setting: Hospital Enrollment period: NR Design: Prospective cohort	Groups: G1: Participants with bilateral undescended testes G2: Participants with undescended testes with hypospadias Participants received 4500 IU of hCG over three consecutive days Inclusion criteria: <ul style="list-style-type: none">• Suspected impaired androgen secretion• Impalpable testes• Hypospadias associated with undescended testes Exclusion criteria: <ul style="list-style-type: none">• Unilateral retention• Both testes palpable inguinally before surgery or found to be normally developed during surgery N at enrollment (N testes): G1: 20 (40) G2: 10 (17) N at follow-up (N testes): G1: 20 (40) G2: 10 (17) Age, range yrs: 1-12 Comorbidities, n (%): Hypospadias: 10 (33.3)	Hormone levels: Serum testosterone value, basal median value (range): G1: 0.67 (0.01-2) G2: 0.53 (0.01-1.4)	Hormone levels: Serum testosterone value, median value (range): G1: 4.16 (0.5-14.5) G2: 4.18 (0.42-13.5) Overall proportion with surgery: NR Proportion with hormone response followed by surgery: NR Proportion with no hormone response followed by surgery: NR Proportion of testes palpable after testing: NR Confirmation of presence of testes: NR

Table D-5. Evidence table template for studies assessing hormonal or surgical treatment (KQ2-3)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author:	Groups: G1: G2:	Unilateral, n (%): G1: G2:	Immediate/short-term: Testicular size and appearance: G1: G2:
Country:	Inclusion criteria: • •	Bilateral, n (%): G1: G2:	Testicular position: G1: G2:
Setting:	Exclusion criteria: • •	Palpability, n (%): G1: G2:	Pain: G1: G2:
Enrollment period: Month YYYY to Month YYYY	N at enrollment (N testes): G1: G2:	Testicle location: G1: G2:	Parent/patient satisfaction: G1: G2:
Design:	N at follow-up (N testes): G1: G2:	Other anomalies, n (%): G1: G2:	Need for further surgical intervention: G1: G2:
Length of followup:	Age at intervention: G1: G2:		Emotional/psychosocial response: G1: G2:
	Sidedness, n (%): Left: G1: G2: Right: G1: G2:		Long-term: Testicular size and appearance: G1: G2:
	Comorbidites, n (%): Com. A: G1: G2: Com B: G1: G2:		Testicular position: G1: G2: Endocrine function: G1: G2: Body image: G1: G2: Parent/patient satisfaction: G1: G2: Infertility/subfertility: G1: G2: Torsion: G1: G2: Testicular malignancy and cancer: G1: G2: Hernia: G1: G2: Emotional/psychosocial response: G1: G2: Adverse effects: G1: G2:

Table D-6. Evidence tables for studies assessing hormonal treatment

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Aycan et al., 2006</p> <p>Country: Turkey</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Prospective cohort</p> <p>Length of followup: 3 weeks</p>	<p>Groups: G1: hCG 500 IU/week for three weeks G2: hCG 1500 IU/m² (min 500 IU/dose- max 1500 IU/dose) three times a week for three weeks</p> <p>Inclusion criteria: • Diagnosis of cryptorchidism from pediatric endocrinology specialist</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment: G1: 21 G2: 14</p> <p>N at follow-up: G1: 21 G2: 14</p> <p>Age at intervention, mean yrs ± SD (range): G1: 5.2 ± 3.1 (0.5-10.8) G2: 5.9 ± 3.9 (0.6-13.9)</p> <p>Sidedness, %: Left: G1: 38.1 G2: 71.4 Right: G1: 81 G2: 57.1</p> <p>Comorbidites: NR</p>	<p>Unilateral, %: G1+G2: 77 Left: 37 Right: 63</p> <p>Bilateral, %: G1+G2: 23</p> <p>Palpability, n (%): Left G1: 21 (100) G2: 11 (78.6) Right: G1: 20 (95.2) G2: 12 (85.7)</p> <p>Testicle location, n (%): Scrotal, left G1: 13 (61.9) G2: 4 (28.6) Scrotal, right G1: 4 (19) G2: 6 (42.9) Prescrotal, left G1: 2 (9.5) G2: 2 (14.3) Prescrotal, right G1: 2 (9.5) G2: 1 (7.1) Inguinal, left G1: 6 (28.6) G2: 5 (35.7) Inguinal, right G1: 14 (66.7) G2: 5 (35.7)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position, %: Undescended, left: G1: 9.5 G2: 35.7 Right: G1: 23.8 G2: 4.3 P> 0.05</p> <p>Total success rate, %: G1: 66.7 G2: 57.1</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Bertelloni et al., 2001</p> <p>Country: Italy</p> <p>Setting: Hospital</p> <p>Enrollment period: 1989-1998</p> <p>Design: RCT</p> <p>Length of followup: 6 months post discontinuation of therapy</p>	<p>Groups: G1: hCG 500 IU/week if ≤ 2 years or 1,000 IU/week if > 2 years for 6 weeks G2: hCG 500 IU/week (≤ 2 years) + hMG 75 IU/week or hCG 1000 IU/week (> 2 years) + hMG 75 IU/week for 6 weeks G3: GnRH 1,200 μg/daily for 28 days G4: GnRH 1,200 μg/daily for 28 days + hCG 1,500 IU/week for 3 weeks</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Unilateral inguinal palpable testis • No clinical evidence of hernia or other endocrine or syndromic conditions impairing descent <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable testes <p>N at enrollment (N testes): G1: 37 (37) G2: 39 (39) G3: 39 (39) G4: 40 (40)</p> <p>N at follow-up (N testes): G1: 37 (37) G2: 39 (39) G3: 39 (39) G4: 40 (40)</p> <p>Age at intervention, range: 10-48 months</p> <p>Sidedness, n (%): Left: 69 (44.5) Right: 86 (55.5)</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): G1: 37 (100) G2: 39 (100) G3: 39 (100) G4: 40 (100)</p> <p>Bilateral, n: 0</p> <p>Palpability, n (%): G1: 37 (100) G2: 39 (100) G3: 39 (100) G4: 40 (100)</p> <p>Testicle location: Inguinal G1: 37 (100) G2: 39 (100) G3: 39 (100) G4: 40 (100)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Temporary descent G1: 8 (21.6) G2: 7 (17.9) G3: 6 (15.4) G4: 9 (22.5)</p> <p>Permanent descent (6 months) n (%) G1: 7 (18.9) G2: 5 (12.8) G3: 5 (12.8) G4: 6 (15.0)</p> <p>Pain: Local pain in injection site in majority of hCG treated boys</p> <p>Adverse effects: G1: NR G2: NR G3: 0 G4: 0</p> <p>Andronization, n (%): G1+G2+G4: 86 (74.1) G3: 2 (5.1)</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Bica and Hadziselimovic 1992, 1993</p> <p>Country: Brazil</p> <p>Setting: Hospital</p> <p>Enrollment period: March 1989 to May 1990</p> <p>Design: RCT</p> <p>Length of followup: 3 months</p>	<p>Groups: G1: Buserelinvia nasal spray 20 µg per day every 8 hours for 28 days + 1,500 IU HCG intramuscularly once a week for 3 weeks G2: Placebo (physiological saline solution) nasal spray for 28 days + 1,500 IU HCG intramuscularly once a week for 3 weeks G3: Orchiopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • True cryptorchidism <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable testes • Ectopic testes • Concomitant hernia • Unsuccessful previous orchiopexy • Unsuccessful hormone treatment • Aarskog syndrome <p>N at enrollment (N testes): G1: 23 (26) G2: 20 (20) G3: 20 (23)</p> <p>N at follow-up: G1: 22 G2: 19 G3: 18</p> <p>Age at intervention, (n) mean ± SD: G1: (22) 3.7 ± 2.0 G2: (19) 4.3 ± 2.0 G3: (18) 4.8 ± 1.9</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): G1: 19/22 (86) G2: 19/19 (100) G3: 15/18 (85)</p> <p>Bilateral, n (%): G1: 3/22 (14) G2: 0/19 (0) G3: 3/18 (17)</p> <p>Palpability: NR</p> <p>Testicle location, n (%):</p> <p>Abdominal G1: 2/25 (8) G2: 3/19 (16) G3: 3/21 (14)</p> <p>Inguinal G1: 12/25 (45) G2: 7/19 (37) G3: 10/21 (48)</p> <p>Prescrotal G1: 11/25 (44) G2: 9/19 (47) G3: 8/21 (38)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Descent, %: G1: 28 G2: 0</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Christiansen et al., 1988, 1992</p> <p>Country: Denmark</p> <p>Setting: 6 participating centers and private physicians' offices</p> <p>Enrollment period: NR</p> <p>Design: RCT</p> <p>Length of followup: 4-8 weeks (not including treatment of 21-28 days)</p>	<p>Groups: G1: hCG 100 IU/kg im (maximum 1500 IU) twice weekly for 3 weeks G2: GnRH, 200 µg in each nostril three times a day for 28 days G3: placebo, 200 µg in each nostril three times a day for 28 days</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Unilateral or bilateral cryptorchidism • No previous hormonal treatment • No operation in inguino-scrotal region • Retractable testes (testes that were spontaneously in position 0-3 but could be manipulated into position 4) <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Inguinal hernia • Ectopic testes • Endocrine or chromosomal disorders • Testes in position 4 at beginning of exam but retracted to suprascrotal location by strong cremaster muscle <p>N at enrollment (N testes): G1: 85 (133) G2: 83 (140) G3: 89 (147)</p> <p>N at follow-up (N testes): G1: 85 (133) G2: 83 (140) G3: 89 (147)</p> <p>Age at intervention, median yrs (range): Bilateral (n=163): 8.2 (1.8 – 13.0) Unilateral (n=94): 8.8 (1.5-13.1)</p> <p>Sidedness: See testicle location</p> <p>Comorbidites: NR</p>	<p>Unilateral, n (%): G1: 37 G2: 26 G3: 31</p> <p>Bilateral, n (%): G1: 48 G2: 57 G3: 58</p> <p>Palpability: See below</p> <p>Testicle location, n (%): Not palpable Bi L: 15 (9) Bi R: 13 (8) Uni L: 4 (4) Uni R: 8 (9) Inguinal Bi L: 107 (66) Bi R: 119 (73) Uni L: 36 (38) Uni R: 36 (38) Suprascrotal Bi L: 19 (12) Bi R: 19 (12) Uni L: 2 (2) Uni R: 6 (6) High Scrotal Bi L: 22 (13) Bi R: 12 (7) Uni L: 1 (1) Uni R: 1 (1) Normal Uni L: 51 (54) Uni R: 43 (46)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Scrotal, bilateral, n: G1: 31 G2: 24 G3: 11 Scrotal, unilateral, n: G1: 7 G2: 1 G3: 1</p> <p>Bilateral, rate of descent %: G1: 23 G2: 9 G3: 2 P=0.0016 Unilateral, %: G1: 19 G2: 0 G3: 3 P=0.0130</p> <p>Adverse effects, n: Pain in genital region, n: G1: 1 G2: 3 G3: 1 Erections G1: 19 G2: 2 G3: 0 Growth of penis G1: 8 G2: 0 G3: 0 Pain at site of injection G1: 3 Nose Bleeding G2: 1 G3: 1 Psychological changes G1: 5 G2: 12 G3: 8</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Compløj et al., 2011</p> <p>Country: Austria</p> <p>Setting: Hospital</p> <p>Enrollment period: January 1993 to June 2009</p> <p>Design: Retrospective cohort</p> <p>Length of followup: 1, 3, and 12 months postoperatively; then annually</p> <p>Time of last follow-up, median months (range): G1: 20 (3 months-14.2 years) G2: 95 (6-164)</p>	<p>Groups: G1: Open one-stage Fowler-Stephens procedure G2: Open two-stage Fowler-Stephens procedure</p> <p>Choice of one- vs. two-stage FS left at discretion of surgeon</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Admitted to institution for treatment of undescended testes Testicular vessels too short for standard orchidopexy <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): G1: 27 (33) G2: 14 (17)</p> <p>N at follow-up (N testes): G1: 27 (33) G2: 14 (17)</p> <p>Age at intervention, months (range): G1: 26 (9-135) G2: 24 (16-162)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): 32 (78)</p> <p>Bilateral, n (%): 9 (22)</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies, n (%): Epididymal separation from the testes 24 (88)</p> <p>Time to diagnosis of testicular atrophy, median months (range): G1: 20 (3-171) G2: 60 (1-160)</p>	<p>Immediate/short-term: Testicular size and appearance: Volume, mean cm³ G1: 0.38 G2: 1.64</p> <p>Volume, median cm³ G1: 0.18 G2: 1.19</p> <p>Volume, SD G1: 0.78 G2: 1.66</p> <p>Volume, min-max cm³ G1: 0.03-3.92 G2: 0.18-5.96</p> <p>G1 vs G2 volume p<0.005</p> <p>Long-term:</p> <p>Testicular position: Result at last follow-up, n testes (%): Successful G1: 21 (64) G2: 13 (76) Acceptable (testis not at deepest point) G1: 5 (15) G2: 1 (6) Unsuccessful (atrophy) G1: 7 (21) G2: 3 (18)</p> <p>Overall success rate, %: G1: 79 G2: 82</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: DeMuinck Keizer -Schrama et al., 1986, 1987 and Hazebroek et al, 1987</p> <p>Country: Netherlands</p> <p>Setting: Hospital</p> <p>Enrollment period: October 1982 to April 1985</p> <p>Design: RCT followed by open cohort</p> <p>Length of followup: 6 months to 2 years</p>	<p>Groups: G1: Synthetic LHRH intranasal 1.2 mg/day, one 200µg puff in each nostril three times a day before meals for 4 weeks G2: Placebo</p> <p>Results evaluated at 8 weeks. All non-responders were offered additional treatment with LHRH. Failure of hormonal treatment followed by surgical intervention: 170 boys (196 testes)* Ga: 36 Gb: 72 Gc: 62</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Cryptorchidism (one or both testes not located in or could not be manipulated fully into the scrotum) <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Previous hormonal or surgical treatment for cryptorchidism • Retractable testes • Truly ectopic testicular positions (perineal, penile, etc) • Concomitant inguinal hernia • Chromosomal or dysmorphic syndromes <p>N at enrollment (N testes): G1 + G2: 252 (301) Ga + Gb + Gc: 170 (196)</p> <p>N at follow-up: G1: 151 G2: 130</p> <p>Age at intervention, mean yrs ± SD: 5.6 ± 3.3</p>	<p>Unilateral, n (%): G1+ G2: 203 (80.6)</p> <p>Bilateral, n (%): G1+G2: 49 (19.4)</p> <p>Palpability, n (%): NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Descent after 8 weeks, n (%): G1: 14 testicles (9) G2: 10 testicles (8) After open study: G1: 13 G2: 21 Complete descent after 8 weeks, n (%): G1A: 1/30 (3) G2A: 0/25 (0) G1B: 1/55 (2) G2B: 6/52 (11) G1C: 12/66 (18) G2C: 4/53 (7) Complete descent after two courses of LHRH in G1 and G2 together n (%) Ga: 4 (7) Gb: 12 (12) Gc: 32 (28) Total: 48 (18) Late descent, n (%) Ga: 3 (5) Gb: 1 (1) Gc: 10 (9) Total: 14 (5)</p> <p>Need for further surgical intervention: G1+G2: 170 (196 testes) Bilateral 26 Unilateral 144 (69 right, 75 left)</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
	Sidedness, n (%): Left: G1+G2: 99 (48.8) Right: G1+G2: 104 (51.2) Comorbidity: NR		

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Esposito et al., 2003</p> <p>Country: Italy</p> <p>Setting: Hospital</p> <p>Enrollment period: January 1997 to June 1999</p> <p>Design: RCT</p> <p>Length of followup: 4-10 weeks</p>	<p>Groups: G1: hCG 500 IU i.m. twice a week for 6 weeks G2: hMG 150 IU i.m. twice a week for 4 weeks G3: LH-RH nasal spray 1.2 mg/day for 4 weeks G4: hMG 150 IU i.m. twice a week for 4 weeks followed by hCG 500 IU i.m. twice a week for 6 weeks G5: LH-RH nasal spray 1.2 mg/day for 4 weeks followed by hCG 500 IU i.m. twice a week for 6 weeks</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Testes palpable in the inguinal canal <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable (non-scrotal testes that could be manipulated into the bottom of the scrotum but immediately retracted to initial prescrotal upon release) • Non-palpable testes <p>N at enrollment: G1: 113 G2: 35 G3: 85 G4: 27 G5: 64</p> <p>N at follow-up: G1: 113 G2: 35 G3: 85 G4: 27 G5: 64</p> <p>Age at intervention, media yrs, (range): 3.5 (1.2-6)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): 230 (71.0) Left: 111 (48.3) Right: 119 (51.7)</p> <p>Bilateral, n (%): 94 (29.0)</p> <p>Palpability, n (%): G1-G5: (100)</p> <p>Testicle location, %: Inguinal: 100</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Descent, n %: G1: 39/113 (34.5) G2: 0/35 (0) G3: 25/85 (29.4) G4: 7/27 (25.9) G5: 19/64 (29.6)</p> <p>Total: 90 (27.7) Bilateral: 36 (38.2) Unilateral: 54 (23.4)</p> <p>P=0.007</p> <p>Need for further surgical intervention: 14 (4.3)</p> <p>Adverse effects: G1, G4, G5: frequent erections, aggressive behavior, development of pubic hair, pain at injection site or inguinal area (n not reported)</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Forest et al, 1988</p> <p>Country: France</p> <p>Setting: Clinic</p> <p>Enrollment period: 1983 to 1988</p> <p>Design: RCT with prospective and retrospective aspects</p> <p>Length of followup: NR</p>	<p>Groups: G1: hCG (1,500 IU/injection) 7 intramuscular injections every other day G1a: Retrospective study (n=352) G1b: Prospective study (n=88) G2: 4 intramuscular injections of hCG in dose related to body weight (100 IU/kg) to a maximum dose of 3,000 IU at 4 day (G2a) or 5 day (G2b) intervals</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Undescended testes <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable testes • Inguinal hernia • Overt endocrine disturbances <p>N at enrollment: G1: 440 G1a: 352 G1b: 88 G2: 95</p> <p>N at follow-up: G1: 440 G2: 95</p> <p>Age at intervention: G1b+G2: range 7 months-12 years</p> <p>Sidedness, n (%): Left: G1: 118/263 G2: 18/57 Right: G1: 145/263 G2: 39/60</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): G1: 263 (60) G1a: 204 (58) G1b: 59 (67) G2: 57 (60)</p> <p>Bilateral, n (%): G1: 177 (40) G1a: 148 (42) G1b: 29 (33) G2: 38 (40)</p> <p>Palpability, n (%): NR G1: 123 G2: 123</p> <p>Testicle location: Abdominal G1a: 320 G1b: 50 G2: 56 Inguinal G1a: 180 G1b: 67 G2: 77</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Successful descent unilateral G1: 107 (40.7) G1a: 77 (37.8) G1b: 30 (50.8) G2: 29 (50.9)</p> <p>Success in bilateral G1: One side 42 Both sides 88 Total 130 (36.7) G1a: One side 34 Both sides 68 Total 102 G1b: One side 8 Both sides 20 Total 28 G2: One side 52 Both sides 116 Total 168 (39.1)</p> <p>Long-term:</p> <p>Endocrine function: Testosterone levels, mean ± SD (median): G1a: 5.86 ± 2.89 (5.25) ng/ml 20.3 ± 10 (182) nmol/l G1b: 5.16 ± 2.73 (4.43) ng/ml 17.9 ± 9.5 (15.4) nmol/l G2: 4.08 ± 2.07 (3.84) ng/ml 14.2 ± 7.2 (13.3) nmol/l</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Hadziselimovic, 2008</p> <p>Country: Switzerland</p> <p>Setting: Hospital, clinic</p> <p>Enrollment period: NR</p> <p>Design: Retrospective case series</p> <p>Length of followup: 15-19 years following initial treatment</p>	<p>Groups: G1: Schoemakers type of orchiopexy between ages 1-6 years subsequently treated within 3 months after surgery with LH-RH, 10 µg applied as intranasal spray in the evening on alternate days for 6 months G2: Age matched controls who had undergone successful Schoemaker type orchiopexy with testicular biopsy results and no additional LH-RH treatment</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Unilateral cryptorchid boys located outside of scrotum since birth • G1: No additional surgeries or severe illnesses requiring hospitalization during the 15-19 years following treatment; no chronic medication use or drug abuse; • G2: no Ad spermatogonia and total # germ cells < 0.2 per tubule <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): G1: 15 (15) G2: 15 (15)</p> <p>N at follow-up (N testes): G1: 15 (15) G2: 15 (15)</p> <p>Age at intervention, mean yrs (range): G1: 3 (1-6) G2: 4 (NR) Age at spermogram, mean yrs: G1: 19 G2: 21 P< 0.02</p> <p>Sidedness: NR Comorbidity: NR</p>	<p>Unilateral, n (%): 30 (100)</p> <p>Bilateral, n: 0</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p> <p>Testicular volume G1: Cryptorchid testis 1.4 (95% CI 0.8-2.1) Descended testis 1.2 (95% CI 1-3.2) Penis length 4.5cm (CI 4-5)</p> <p>Ad spermatogonia at surgery G1: 0 G2: 0</p> <p>S/T at surgery G1: 0 (95%CI 0-0.05) G2: 0.02 (95% CI 0-2) p=0.22</p> <p>Unsuccessful HCG treatment prior to surgery G2: 13/15</p>	<p>Immediate/short-term: NR</p> <p>Long-term:</p> <p>Testicular size and appearance: G1: Cryptorchid testis 1.2(95% CI 1-3.2) P=0.65 Descended testis 1.4 (95% CI 1-2.5) P=0.52 Penis length 5.0 cm (CI 4.5-6) P<0.001</p> <p>Germ cells, average # per tubular cross section: G1: 0 (95% CI 0- 0.05) G2: 0.02 (95% CI 0-0.05) P=0.22</p> <p>Infertility/subfertility: Sperm count/ejaculate (mio): G1: 90 (95% CI 53-164) G2: 1.0 (95%CI 0-13) P≤ 0.0001 Ejaculate volume (mL) G1: 4.1 (95% CI 1.2-7) G2: 4.6 (95% CI 2.9- 8.2) P=0.074 Normal morphology G1: 11% (95%CI 0-21) G2: 0</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Hadziselimovic et al., 1997</p> <p>Country: Switzerland</p> <p>Setting: NR</p> <p>Enrollment period: NR</p> <p>Design: Retrospective cohort</p> <p>Length of followup: NR</p>	<p>Groups: G1: Previously underwent orchiopexy after failure to respond to hCG treatment, then received long-term treatment of buserelin nasal spray 10µg every other day for 6 months after successful orchiopexy G2: No hormone treatment after orchiopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Previously underwent orchiopexy <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • None had secondary testicular ascent, previous inguinal surgery before orchiopexy, congenital malformation, or long-standing illness <p>N at enrollment (N testes): G1: 10 (14) G2: 23 (33)</p> <p>N at follow-up (N testes): G1: 10 (14) G2: 23 (33)</p> <p>Age at study, mean yrs ± SD: G1: 22.1 ± 2.07 (underwent orchiopexy at 9.4 ± 2.8) G2: 20.9 ± 2.5</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral: G1: 6 G2: 13</p> <p>Bilateral, n: G1: 4 G2: 10</p> <p>Palpability, n (%): NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR NR</p> <p>Long-term:</p> <p>Infertility/subfertility: Spermiogram results: Increase in number of spermatozoa, increased number of normal forms of spermatozoa per ejaculate, improved sperm motility in G1 Number of sperm: G1: 29.4 G2: 6.5 P<0.005</p> <p>Percent of normal sperm: G1: 31.8 G2: 15.2 P < 0.03</p> <p>Percent of motile sperm G1: 41.3 G2: 11.2 P<0.001</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Hagberg and Westphal, 1982</p> <p>Country: Sweden</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: RCT</p> <p>Length of followup: 4 weeks to 12 months</p>	<p>Groups: G1: Two nasal applications of 100 µg LH-RH with an interval of 30-60 minutes 3 times a day for 28 days (total daily dose 600 µg) G2: Placebo nasal spray for 28 days G2a: Subsequently treated with LH-RH after 28 days</p> <p>Inclusion criteria: • Undescended testes</p> <p>Exclusion criteria: • Testes that could be manipulated to bottom of scrotum even if spontaneous location was in the scrotal neck</p> <p>N at enrollment (N testes): G1: 25 G2: 25</p> <p>N at follow-up (N testes): G1: 23 (29 testes) G2: 24 (32 testes)</p> <p>Age at intervention, mean yrs (range): 5 (1.5 – 10.5)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Therapeutic effect: G1: 18/29 testes (3 non-palpable moved to inguinal; 7 inguinal moved to scrotal neck; 2 inguinal and 6 scrotal neck- complete descent) G2: 1/32 testes placebo G2a: 19 testes moved (1 nonpalpable moved to inguinal; 1 nonpalpable moved to scrotal neck; 9 inguinal moved to scrotal neck; 5 inguinal and 3 scrotal neck – complete descent)</p> <p>G1+G2a combined (n=46, 60 testes): 4 palpable moved to inguinal; 1 non palpable moved to scrotal neck; 16 inguinal moved to scrotal neck; 7 inguinal and 9 scrotal neck – complete descent. 5 non palpable, 10 inguinal and 8 scrotal neck unchanged.</p> <p>Follow-up study 6-12 months after LH-RH treatment in 23 cases with initial descent from inguinal to scrotal position 18 testes remained completely descended 2 inguinal relapsed to scrotal neck and 3 relapsed to inguinal</p> <p>Adverse effects, n: More active G1: 3 G2: 1 G2a: 6 More aggressive G1: 1 G2: 1 G2a: 6 Furunculosis G1: 0 G2: 0 G2a: 2</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
			Impetigo G1: 0 G2: 0 G2a: 1 Local symptoms of nasal application G1: 1 G2: 1 G2a: 0 <u>Long-term:</u> NR

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author: Hesse and Fischer, 1988 Country: Germany Setting: Hospital Enrollment period: NR Design: RCT Length of followup: 8 wks to 6 months	Groups: G1: hCG 300-1000 IU, 2 IM injections/week G2: hCG 1000-500 IU, IM injection every 7-10 days Inclusion criteria: See exclusion criteria Exclusion criteria: <ul style="list-style-type: none"> Treatment continued outside catchment area N at enrollment (N testes): 395 (NR) N at follow-up (N testes): 332 (435) G1: 163 (NR) G2: 169 (NR) Age at intervention range yrs: 1-13 Sidedness: NR Comorbidity: NR	Unilateral, n (%)*: 173 (52.1) Bilateral, n (%)*: 163 (49.1) Palpability: NR Testicle location, n: Abdominal: G1: 54 G2: 37 Inguinal: G1: 134 G2: 114 Retractable: G1: 15 G2: 41 Scrotal G1: 39 G2: 46 Other anomalies: NR	Immediate/short-term: Testicular position: Scrotal descent, %: G1: 39.4 G2: 29.9 Long-term: NR NR

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Karpe et al., 1983</p> <p>Country: Sweden</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: RCT</p> <p>Length of followup: 6 months</p>	<p>Groups: G1: LHRH (HOE 471) intranasal spray 100µg in each nostril 6 times a day, minimum time lapse of 1 hour between doses for 28 days G2: Placebo</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Unilateral undescended but palpable testes • No previous treatment for undescended testis <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable testes • Any sign of hernia • Previous inguinal surgery <p>N at enrollment (N testes): G1: 25 (25) G2: 25 (25)</p> <p>N at follow-up (N testes): G1: 25 (25) G2: 25 (25)</p> <p>Age at intervention, mean yrs ± SD (range): 6.3 ± 1.4 (3-8)</p> <p>Sidedness: NR</p> <p>Comorbidites: NR</p>	<p>Unilateral, n (%): G1: 25 (100) G2: 25 (100)</p> <p>Bilateral, n: 0</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p> <p>Mean basal serum testosterone: G1: 36.9 ± 17.3 G2: 31.7 ± 11.5</p>	<p>Immediate/short-term:</p> <p>Testicular position: Descent after treatment, n (%): G1: 5 (20.0) (3 complete, 2 borderline) G2: 3 (12.0) 6 months later G1: 2 (8.0) G2: 1 (4.0)</p> <p>Mean basal serum testosterone: after treatment G1: 58.9 ± 31.7 pmol/L G2: 34.9 ± 20.9 pmol/L</p> <p>Post treatment FSH peak decreased in significant # of patients (p<0.001)</p> <p>Need for further surgical intervention, n (%): 39 (78.0)</p> <p>Adverse effects, n (%): Sparse moustache:1 Hydrocele of tunica vaginalis: G1: 3 (12.0) G2: 0</p> <p>Bilateral increase of < 1ml testicular volume occurred in significant number of G1 followed by decrease during months after treatment (p< 0.001)</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Olsen et al, 1992</p> <p>Country: Denmark</p> <p>Setting: Hospitals</p> <p>Enrollment period: NR</p> <p>Design: RCT</p> <p>Length of followup: 2 weeks (not including 4 week intervention)</p>	<p>Groups: G1: LHRH nasal spray (0.4 mg three times daily) G2: Placebo nasal spray three times daily</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • At least one non descended testis at clinical examination • No former treatment for non-descended testis • No clinical signs of endocrine disease • No clinical signs of beginning puberty • No former surgery in the inguinal area • No clinical sign of inguinal hernia or ectopia • Age ≥ 2 years • Retractable (testes located in high scrotal position but could be manipulated into bottom of scrotum) <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Testes remaining non-palpable after manipulation and caudal traction in the inguinal region or bilateral retention on both sides <p>N at enrollment: G1: 70 G2: 71</p> <p>N at follow-up (N testes): G1: 62 (97) G2: 61 (90)</p> <p>Age at intervention, median yrs (range): 6 (2-12)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral, n: G1: 27 G2: 32</p> <p>Bilateral, n: G1: 35 G2: 29</p> <p>Palpability: NR</p> <p>Testicle location: Non palpable, n testes: G1: 7 G2: 9 Inguinal G1: 76 G2: 73 High scrotal G1: 14 G2: 8</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Full response for non descended testes, n participants (%) G1: 6/62 (9.7) G2: 1/61 (1.6) Therapeutic gain of G1: 8.1% (95% CI 0.1-16.6%) p=0.12</p> <p>Unilateral non-descended, n participants (%): G1: 1/27 (3.7) G2: 1/32 (3.1) Therapeutic gain of G1: 0.6% (95% CI 0.0-16.1) p=1.0</p> <p>Bilateral non descended-both descended, n participants (%): G1: 5/35 (14.2) G2: 0/29 (0) Therapeutic gain of G1: 14.3% (95% CI 2.7-25.1) p=0.09</p> <p>Total full response, n testes (%) G1: 19/97 (19.6) G2: 2/90 (2.2) Therapeutic gain of G1: 17.4% (95% CI 8.9-25.8, p=0.0002)</p> <p>Bilateral non descended (n=128) G1: 18/70 (25.7) G2: 1/58 (1.7) Therapeutic gain of G1: 24.0% (95% CI 13.2-34.8, p=0.0001)</p> <p>Need for further surgical intervention: G1+G2: 74 (95 testes)</p> <p>Adverse effects: Reversible changes in behavior G1: 0 G2: 2</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Rajfer et al, 1986</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: RCT</p> <p>Length of followup: 3 months (after treatment)</p>	<p>Groups: G1: Intranasal GnRH spray 100 µg + placebo injection G2: hCG 3300 IU per 1.65 ml injection + placebo nasal spray</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Cryptorchidism-intraabdominal (non palpable) intracanalicular, emergent at external inguinal ring or ectopic in superficial pouch <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Retractable testes • Endocrine disorder <p>N at enrollment (N testes): G1: 16 (17) G2: 17 (20)</p> <p>N at follow-up (N testes): G1: 16 (17) G2: 17 (20)</p> <p>Age at intervention, range yrs: 1-5</p> <p>Sidedness: NR</p> <p>Comorbidites: NR</p>	<p>Unilateral, n: G1: 15 G2: 14</p> <p>Bilateral, n: G1: 1 G2: 3</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p> <p>LH level, mean ± SD: 2.7 ± 0.2 (n=16)</p> <p>Testosterone level, mean ± SD: G1: 15.4 ± 2.4 G2: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Descent, n: G1: 3 G2: 1</p> <p>Endocrine: Serum LH levels: 30 minutes after 1st treatment: G1: 9.4 ± 1.3 (n=16) 60 minutes after 1st treatment G1: 8.6 ± 1.3 (n=15)</p> <p>Adverse effects, n: Increase in penile size: 7 Increase in testicular size: 4 Scrotal redness: 2 Increase in erections: 2 Demonstrated aggressive behavior: 2</p> <p>Long-term: NR</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Wit et al., 1986</p> <p>Country: Netherlands</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: RCT followed by open label</p> <p>Length of followup: RCT: 8 weeks Open label: 12 months</p>	<p>Groups: G1: 400 µg LHRH in nasal spray 3 times a day for 4 weeks G2: Spray with no LHRH</p> <p>Code was broken after 8 weeks. LHRH offered for second course to both groups. After 1 or 2 unsuccessful LHRH treatments, surgery or hGH therapy proposed.</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Unilateral or bilateral cryptorchidism (one or both testes are not localized in or cannot be moved into the lower part of the scrotum) <p>Exclusion criteria:</p> <ul style="list-style-type: none"> Patients with one of the indications for primary surgical intervention Congenital syndromes Previously treated for cryptorchidism <p>N at enrollment (N testes): G1: 26 (35) G2: 23 (34)</p> <p>N at followup (N testes), 8 weeks: G1: 26 (35) G2: 23 (34)</p> <p>N at followup, 12 months: 48</p> <p>Age at intervention mean yrs (range): 5.9 (1.2-11.9)</p> <p>Sidedness: NR</p> <p>Comorbidites: NR</p>	<p>Unilateral, n (%): G1: 17 (65.4) G2: 12 (52.2)</p> <p>Bilateral, n (%): G1: 9 (34.6) G2: 11 (47.8)</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p> <p>LH (IU/l), median (range) 0 G1: 1.3 (1.0-3.4) G2: 1.3 (<1.0-1.8) 30 G1: 5.3 (1.0-20.0) G2: 6.3 (1.8-18.2) 60 G1: 4.05 (2.0-16.0) G2: 4.2 (1.6-11.5)</p> <p>FSH (IU/l) median (range) 0 G1: <0.9 (<0.9-2.1) G2: 1.0 (<0.9-2.2) 30 G1: 4.0 (0.9-5.6) G2: 3.3 (2.0-8.5) 60 G1: 4.0 (1.0-7.1) G2: 3.5 (1.4-9.7)</p> <p>Testosterone (nmol/l) Mean, median (range) G1: 0.20 0.17 (0.08-0.50) G2: 0.17 0.17 (<0.05-0.40)</p> <p>SHBG (nmol/l) Mean ±SD Median (range) G1: 79±20 80 (46-134) G2: 80±27 84 (23-123)</p>	<p>Immediate/short-term:</p> <p>Testicular position: 4 weeks To the scrotum G1: 1 (3) G2: 2 (6) To scrotal neck G1: 3 (9) G2: 0 (0) To inguinal canal G1: 6 (17) G2: 7 (21) Unchanged G1: 21 (60) G2: 23 (68) Impalpable G1: 4 (11) G2: 2 (6)</p> <p>8 weeks To the scrotum G1: 3 (9) G2: 0 (0) To scrotal neck G1: 2 (6) G2: 2 (6) To inguinal canal G1: 8 (23) G2: 4 (12) Unchanged G1: 20 (57) G2: 26 (76) Impalpable G1: 2 (6) G2: 2 (6)</p> <p>Change in position of undescended testes at 8 weeks[#], mean cm ± SD (number testes): Supine before caudal traction G1 (unilateral): 0.9±1.4 (17) G2 (unilateral): 0.3±0.9 (12) G1 (bilateral): 0.5±1.7 (18) G2 (bilateral): 0.4±1.7 (22) Supine during caudal traction G1 (unilateral): 1.1±1.2 (17) G2 (unilateral): 0.7±1.3 (12) G1 (bilateral): 1.5±1.7 (18) G2 (bilateral): 0.3±1.1 (20) Squatting without traction G1 (unilateral): 1.0±1.6 (17) G2 (unilateral): 0.4±0.9 (11) G1 (bilateral): 1.0±1.0 (17) G2 (bilateral): 0±1.9 (19)</p>

Table D-6. Evidence tables for studies assessing hormonal treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
			<p>Endocrine function:</p> <p>LH (IU/l), median (range)</p> <p>0</p> <p>G1: 4.7(1.0-11.7)*</p> <p>G2: 1.2 (<1.0-1.8)</p> <p>30</p> <p>G1: 7.5 (4.2-15.3)*</p> <p>G2: 5.1 (1.8-16.6)</p> <p>60</p> <p>G1: 4.8 (2.6-11.1)</p> <p>G2: 3.0 (1.8-11.4)</p> <p>FSH (IU/l) median (range)</p> <p>0</p> <p>G1: 1.2 (<0.9-3.4)*</p> <p>G2: 0.9 (<0.9-2.5)</p> <p>30</p> <p>G1: 2.4 (<0.9-4.9)*</p> <p>G2: 2.8 (<0.9-6.7)</p> <p>60</p> <p>G1: 2.0 (<0.9-4.9)*</p> <p>G2: 3.3 (<0.9-7.7)</p> <p>Testosterone (nmol/l)</p> <p>Mean, median (range)</p> <p>G1: 0.39 0.21 (0.07-2.10)</p> <p>G2: 0.16 0.13 (<0.05-0.65)</p> <p>G2: after LHRH treatment</p> <p>0.36 0.30 (0.05-1.20)</p> <p>SHBG (nmol/l)</p> <p>Mean ±SD Median (range)</p> <p>G1: 76±24 76 (39-141)</p> <p>G2: 77±26 80 (31-115)</p> <p>G2 after LHRH treatment</p> <p>75±22 75 (49-109)*</p> <p>*P < 0.01 compared to baseline</p> <p>Adverse effects:</p> <p>Aggressive behavior</p> <p>G1: 23%</p> <p>G2: 0</p> <p>Long-term:</p> <p>Testicular size and appearance:</p> <p>No changes observed in testicular volume</p> <p>Testicular position:</p> <p>One year:</p> <p>Bilateral n=19 (38 testes)</p> <p>21 testes did not descend</p> <p>17 showed some descent but 7 re-ascended</p> <p>23 testes were operated on</p> <p>Unilateral n=29 (29 testes)</p> <p>4 testes descended to retractile position</p> <p>23 testes were operated on</p>

Table D-7. Evidence tables for studies assessing surgical treatment

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Abolyosr et al., 2006</p> <p>Country: Egypt</p> <p>Setting: Hospital</p> <p>Enrollment period: December 2001 to May 2005</p> <p>Design: RCT</p> <p>Length of followup: 9-31 months</p>	<p>Groups: G1: Participants with high abdominal testes G1a: Laparoscopic FSI followed by open FSII G1b: Laparoscopic FSI followed by laparoscopic FSII G2: Low abdominal and peeping testes G2a: Laparoscopic primary orchiopexy G2b: Open primary orchiopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Patients with non-palpable testes confirmed by laparoscopy <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Vanished testes • Vessels and vas enter the internal ring <p>N testes at enrollment: G1a: 20 G1b: 21 G2a: 18 G2b: 16</p> <p>N testes at follow-up: G1a: 20 G1b: 21 G2a: 18 G2b: 16</p> <p>Age at intervention, mean yrs (range): 5.3 (1-16)</p> <p>Sidedness, n (%): Left: 32 (37) Right: 45 (52) Bilateral: 10 (11)</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): 65 (86.7)</p> <p>Bilateral, n (%): 10 (13.3)</p> <p>Palpability: See inclusion criteria</p> <p>Testicle location, n (%): High abdominal: 41 (54.7) Low abdominal: 34 (45.3)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: All patients had satisfactory scrotal position post-operatively</p> <p>Adverse effects: Atrophy, n(%): G1a: 2 (10.0) G1b: 0 G2a: 0 G2b: 3 (18.8)</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Al-Mandil et al., 2008</p> <p>Country: Canada</p> <p>Setting: Academic medical</p> <p>Enrollment period: January 2004 to March 2007</p> <p>Design: Retrospective cohort</p> <p>Length of followup: 6 to 42 months</p>	<p>Groups: G1: Participants operated on via a prescrotal approach by a single surgeon G2: Age-matched participants, operated on via an inguinal approach by another surgeon</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Palpable undescended testes Position of the testis confirmed under general anesthesia <p>Exclusion criteria:</p> <ul style="list-style-type: none"> Retractile testis Ectopic testis Lack of postoperative follow-up data and operative time documentation <p>N at enrollment (N testes): G1: 56 (63) G2: 47 (53)</p> <p>N at follow-up: G1: 56 (63) G2: 47 (53)</p> <p>Age at intervention, mean yrs: G1: 4.6 G2: 4.7</p> <p>Sidedness, n (%): Left: G1: 33 (52) G2: 24 (45) Right: G1: 30 (48) G2: 29 (55)</p> <p>Comorbidites: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location, n (%): External ring: G1: 26 (41) G2: 21 (40) Canalicular: G1: 37 (59) G2: 32 (60)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Need for further surgical intervention, n (%): Testicular ascent requiring redo inguinal orchiopexy G1: 1 (1.6) G2: 1 (1.9) p = NS</p> <p>Adverse effects, n (%): Wound infection G1: 1 (1.6) G2: 1 (1.9) p = NS</p> <p>Hernia: G1: 2 (3.2) – one incarcerated hernia at one week postop requiring emergency operation and bowel resection; one asymptomatic swelling at 8 months G2: 0 p = NS</p> <p>Testicular atrophy: G1: 0 G2: 0</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Anoussakis et al., 1983</p> <p>Country: Greece</p> <p>Setting: NR</p> <p>Enrollment period: NR</p> <p>Design: Retrospective cohort</p> <p>Length of followup: NR</p>	<p>Groups: G1 and G2: Prepubertal boys with true cryptorchidism G1a: Unilateral cryptorchidism without surgery G1b: Bilateral cryptorchidism without surgery G2a: Unilateral cryptorchidism with surgery G2b: Bilateral cryptorchidism with surgery G3: Comparison group with normal testes</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • True undescended testes defined as one or both testicles outside the scrotum <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Testicles outside the scrotum that could be retracted into the scrotum through palpation • Obese children • patients given hCG previously • Patients with previous orchiopexy <p>N at enrollment (N testes): G1 and G2: 52 (71) G1a: 13 (13) G1b: 17 (34) G2a: 10 (10) G2b: 12 (24) G3: 10 (normal testes)</p> <p>N at follow-up: G1 and G2: 52 (71) G1a: 13 (13) G1b: 17 (34) G2a: 10 (10) G2b: 12 (24) G3: 10 (normal testes)</p> <p>Age at intervention, mean yrs (range): G1a: 9.3 (6.1-12.5) G1b: 8.6 (6.1-11.3)</p>	<p>Unilateral, n (%): G1a: 13 (100) G1b: 0 G2a: 10 (100) G2b: 0 G3: N/A</p> <p>Bilateral, n (%): G1a: 0 G1b: 34 testicles, 17 patients (100) G2a: 0 G2b: 24 testicles, 12 patients (100) G3: N/A</p> <p>Palpability: NR</p> <p>Testicle location: Upper inguinal canal: G1a: 2 G1b: 5 G2a: 2 G2b: 6 Middle inguinal canal: G1a: 7 G1b: 14 G2a: 5 G2b: 10 Low inguinal canal: G1a: 4 G1b: 11 G2a: 2 G2b: 4 Internal inguinal ring: G1a: 0 G1b: 2 G2a: 1 G2b: 2 Intraabdominal: G1a: 0 G1b: 2 G2a: 0 G2b: 2</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR</p> <p>Long-term:</p> <p>Endocrine function: Plasma testosterone concentrations before hCG stimulation, mean ± SD (range): G1a: 0.221±0.191 (0.05 to 0.80) G1b: 0.159±0.117 (0.05 to 0.60) G2a: 0.164±0.166 (0.05 to 0.36) G2b: 0.142±0.071 (0.08 to 0.31) G3: 0.183 ± 0.042 p = NS</p> <p>Plasma testosterone concentrations after hCG stimulation, mean ± SD (range): G1a: 1.589±0.680 (0.70 to 3.40) G1b: 0.939±0.536 (0.35 to 2.50) G2a: 1.532±0.338 (1.12 to 2.10) G2b: 1.577 ± 0.720 (0.45 to 3.10) G3: 1.674± 0.399 G1a vs G2a: p = NS G1b vs G2b: p <0.05 G1b vs G1a: p<0.01 G1b vs G2b: p = NS G2a vs G2b vs G3: p = NS G1b vs G3: p < 0.001</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
	G2a: 8.5 (7.8-9.8) G2b: 9.1 (6.1-11.3) G3: 8.2 (6.8-10.2), no intervention		
	Sidedness: NR		
	Comorbidity: NR		

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Arda et al., 2001</p> <p>Country: Turkey</p> <p>Setting: Hospital</p> <p>Enrollment period: 4-year period</p> <p>Design: RCT</p> <p>Length of followup, mean months ± SD (range): 28.0 ±11.4 (6-48)</p>	<p>Groups: G1: Testes fixed to the scrotum with 4-0 polyglactin suture (Vicryl) passed through the tunica vaginalis of the testis by everting the scrotal wall G2: Testes placed in the scrotal pouch without fixation but fascial opening of the pouch was narrowed around the ductus deferens and vessels to just permit passage G3: Testes fixed to the scrotal wall as in G1 and fascial opening narrowed as in G2</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Unilateral cryptorchidism • All testes palpated before operation and deemed manually non-retractable <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): G1: 50 (50) G2: 50 (50) G3: 50 (50)</p> <p>N at follow-up, testes: G1: 50 (50) G2: 50 (50) G3: 50 (50)</p> <p>Age at intervention, mean yrs ± SD (range): 3.7 ± 1.4 (1-10)</p> <p>Sidedness, n (%): Left: 36 (24.0) Right: 114 (76.0)</p> <p>Comorbidites: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: G1: Inguinal canal No: 4 Moderate: 5 Severe: 2 Outside the inguinal canal No: 26 Moderate: 12 Severe: 1 G2: Inguinal canal No: 3 Moderate: 3 Severe: 2 Outside the inguinal canal No: 20 Moderate: 19 Severe: 3 G3: Inguinal canal No: 6 Moderate: 5 Severe: 2 Outside the inguinal canal No: 22 Moderate: 13 Severe: 2</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: Testicular size and appearance: Testicular atrophy, n (%): G1: 1 (0.6) G2: 1 (0.6) G3: 0 Both developed in first or second postoperative months</p> <p>Testicular position: Postoperative ascensus G1: Inguinal canal, 3 (6.0) No: 0 Moderate: 1 Severe: 2 Outside the inguinal canal, 1 (2.0) No: none Moderate: none Severe: 1 G2: 0 G3: 0 p = NS for location of testes among groups</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Baker et al., 2001</p> <p>Country: United States</p> <p>Setting: Hospital</p> <p>Enrollment period: 1990 to 1999</p> <p>Design: Retrospective cohort</p> <p>Length of followup (mean months): G1: 7.7 G2: 8.6 G3: 20</p>	<p>Groups: G1: Primary laparoscopic orchidopexy G2: One-stage Fowler-Stephens orchidopexy G3: Two-stage Fowler-Stephens orchidopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Testis was intraabdominal at laparoscopic examination • Patients of participating pediatric urology centers <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Managed through an open approach • Underwent orchidectomy <p>N at enrollment (N testes): G1: 178 (208) G2: 25 (28) G3: 63 (74)</p> <p>N at follow-up (N testes): G1: 153 (178) G2: 24 (27) G3: 49 (58)</p> <p>Age at intervention (mean months): G1: 36.2 G2: 31.3 G3: 54.6</p> <p>Sidedness: NR</p> <p>Comorbidities, n (%): Prune belly: 3 (1.3) Other*: 38 (16.8)</p>	<p>Unilateral, n (%): At baseline G1: 148 (83.1) G2: 22 (88.0) G3: 52 (82.5) At follow-up G1: 128 (83.7) G2: 21 (87.5) G3: 40 (81.6)</p> <p>Bilateral, n (%): At baseline G1: 30 (16.9) G2: 3 (12.0) G3: 11 (17.5) At follow-up G1: 25 (16.3) G2: 3 (12.5) G3: 9 (18.4)</p> <p>Palpability: NR</p> <p>Testicle location: G1: Ectopic: 9 <2 cm from ring: 71 >2 cm from ring: 54 Peeping: 47 G2: Ectopic: 1 <2 cm from ring: 1 >2 cm from ring: 26 Peeping: 1 G3: Ectopic: 10 <2 cm from ring: 14 >2 cm from ring: 46 Peeping: 1</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: Testicular size and appearance: Atrophy, %: G1: 2.2 G2: 22.2 G3: 10.3 p < 0.001</p> <p>Testicular position: Bad positioning, %: G1: 0.6 G2: 7.4 G3: 1.7</p> <p>Overall success, %: G1: 97.2 G2: 74.1 G3: 87.9</p> <p>19 surgical failures including 13 testes >2cm from internal ring, 3 ectopic, 2 <2cm from ring, and one peeping.</p> <p>Adverse effects (not provided by group): Major complications, n: Caecal volvulus: 1 Bladder perforation: 2 Ileus: 2 Spermatic vessels torn leading to one-stage Fowler-Stephens orchidopexy: 2 Small laceration of the vas: 1 Veress needle puncture into the sigmoid colon: 1</p> <p>Minor complications, n: Preperitoneal insufflations: 2 Desaturation with an intraabdominal pressure of >10mmHg: 1 Wound separation: 1 Hydrocele: 1 Wound infection: 1</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Chandrasekharam, 2005</p> <p>Country: India</p> <p>Setting: NR</p> <p>Enrollment period: 3.5 years</p> <p>Design: Retrospective cohort</p> <p>Length of followup: 4-6 weeks</p>	<p>Groups: G1: Initial laparoscopic evaluation for unilateral nonpalpable undescended testicle G2: Age-matched children that had undergone initial inguinal exploration for nonpalpable undescended testicle</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Nonpalpable undescended testicle <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Testis became palpable under anesthesia <p>N at enrollment, testes: G1: 20 G2: 20</p> <p>N at follow-up, testes: G1: 13 underwent orchiopexy G2: 14 underwent orchiopexy</p> <p>Age at intervention, mean years: G1: 3.1 G2: 3.4</p> <p>Sidedness, n (%): NR</p> <p>Comorbidity, n (%): NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: G1: Canalicular: 11 Low abdominal: 5 High abdominal: 4 G2: Canalicular: 8 Low abdominal: 9 High abdominal: 3</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Atrophy at 4-6 weeks, n testes (%): G1: 2 (15.4) G2: 2 (14.3)</p> <p>Success of orchiopexy, n testes (%): G1: 11 (84.6) G2: 12 (85.7)</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Chang et al., 2001</p> <p>Country: United States</p> <p>Setting: Hospital</p> <p>Enrollment period: 1994 to 1999</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean months (range): 8 (1- 60)</p>	<p>Groups: G1: Standard laparoscopic orchidopexy G2: Single-stage Fowler-Stephens orchidopexy G3: Two-stage Fowler-Stephens orchidopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Underwent laparoscopic orchidopexy for impalpable testis identified in records <p>Exclusion criteria:</p> <ul style="list-style-type: none"> First-stage Fowler-Stephens orchidopexy <p>N at enrollment, testes: G1: 72 G2: 20 G3: 9</p> <p>N at follow-up, testes: G1: 72 G2: 18 G3: 9</p> <p>N at 6-month followup, testes: G1: 66 testicles G2 and G3: 26 testicles</p> <p>Age at intervention median yrs (range): 1.5 (0.5 – 12)</p> <p>Sidedness, n (%): Left: 39 (50) Right: 20 (25) Bilateral: 21 patients (25)</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): 59 (75)</p> <p>Bilateral, n (%): 21 (25)</p> <p>Palpability: All impalpable</p> <p>Testicle location, n testes: Intraabdominal: 46 Iliac: 14 Internal ring: 22 Peeping: 12 Retrovesical: 3 Intracanalicular: 4</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Success rate defined as intrascrotal testis with no atrophy at least 6 months later, n (%) G1: 62 (92%) G2 and G3: 26 (100%) G2: 19 (100%) G3: 7 (100%)</p> <p>Subsequent atrophy: G2 and G3: 4 testes</p> <p>Testes near the pubic bone: 4</p> <p>Adverse effects, n participants: Serosal tear or colon: 1 Ileus: 3 Scrotal wound separation: 1</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author: Chang et al., 2008 Country: US Setting: Hospital Enrollment period: August 1995 to February 2007 Design: Retrospective cohort Length of followup, mean months: G1: 17.5 G2: 11.8	Groups: G1: One-stage Fowler-Stephens orchiopexy G2: Two-stage Fowler-Stephens orchiopexy Inclusion criteria: • Nonpalpable testis Exclusion criteria: See inclusion criteria N at enrollment (N testes): G1: 38 (38) G2: 10 (10) N at follow-up (N testes): G1: 35 (35) G2: 10 (10) Age at intervention. Mean months: G1: 34.9 G2: 45.3 Sidedness: NR Comorbidites: NR	Unilateral, n (%): 48 (100) Bilateral, n: 0 Palpability: See inclusion criteria Testicle location: NR Other anomalies: NR	Immediate/short-term: Testicular position, n (%): Success rate: G1: 33 (94.3) G2: 8 (80.0) Adverse effects: Atrophy: G1: 2/38 G2: 2/10 Long-term: NR

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author: Cloutier et al., 2011	Groups: G1: Orchiopexy via low scrotal mid-raphe incision G2: Orchiopexy via high scrotal (Bianchi) incision G3: Orchiopexy via conventional inguinal 2-incision technique	Unilateral, n (%): G1: 37 (45.7) G2: 28 (63.6) G3: 77 (86.5) Bilateral, n (%): G1: 44 (54.3) G2: 16 (36.4) G3: 12 (13.5)	Immediate/short-term: Testicular position: Successful repair (descent), n testes (%): G1: 124 (99.2) G2: 59 (98.3) G3: 101 (100) p = NS
Country: Canada			
Setting: Hospital			
Enrollment period: January 2003 to September 2009	Inclusion criteria: <ul style="list-style-type: none">Participants who underwent orchiopexy for palpable undescended testes	Palpability: See inclusion criteria	Long-term: NR
Design: Retrospective cohort		Testicle location: NR	
Length of followup: Minimum of 3 months	Exclusion criteria: See inclusion criteria	Other anomalies: NR	
	N at enrollment (N testes): 214 (286) G1: 81 (125) G2: 44 (60) G3: 89 (101)		
	N at follow-up, testes: 214 (286) G1: 81 (125) G2: 44 (60) G3: 89 (101)		
	Age at intervention, mean months ± SD: G1: 63 ± 24 G2: 53 ± 23 G3: 26 ± 11		
	Sidedness, n (%): Left: 60 (28.0) Right: 82 (38.4)		
	Comorbidites: NR		

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author: Denes et al., 2008	Groups: G1: Primary orchiopexy G2: 1-stage Fowler-Stephens G3: 2-stage Fowler-Stephens	Unilateral, n (%): 56 (45.2)	Immediate/short-term:
Country: Brazil	Inclusion criteria: • Impalpable testes	Bilateral, n (%): 68 (54.8)	Testicular position: Descent, n (%) G1: 25 (96.1) G2: 1 (33.3) G3: 22 (88.0)
Setting: Hospital	Exclusion criteria: See inclusion criteria	Palpability: See inclusion criteria	Adverse effects: Atrophy, n (%) G1: 1 (3.9) G2: 2 (66.7) G3: 3 (12.0)
Enrollment period: September 1994 to September 2005	N at enrollment (N testes): 90 (124)	Testicle location, n (%): Absent: 26 (21.0) Canalicular: 32 (25.8) Intraabdominal: 66 (53.2)	Long-term: NR
Design: Retrospective cohort	N at follow-up (N testes): G1: 24 (26) G2: 3 (3) G3: 19 (25)	Other anomalies: NR	
Length of followup: 6 to 100 months	Age at intervention, mean yrs (range): 6.4 (0.9 – 22)		
	Sidedness, n (%): Right: 20 (16.1) Left: 36 (29.0)		
	Comorbidites: NR		

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Dhanani et al 2004</p> <p>Country: United States</p> <p>Setting: academic medical</p> <p>Enrollment period: 1994 to 2001</p> <p>Design: retrospective</p> <p>Length of followup: mean 9 months, median 1 year</p>	<p>Groups: G1: Primary orchiopexy without division of the spermatic vessels performed If any portion of the testis or epididymis was able to reach the pubis G2: Staged Fowler-Stephens orchiopexy in patients with high testes and short vessels precluding the testis from reaching the pubis</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Nonpalpable testes <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Palpable inguinal testis after induction of general anesthesia <p>N at enrollment (N testes): G1: 27 (28) G2: 47 (55)</p> <p>N at follow-up (N testes): 69 (NR)</p> <p>Age at intervention: NR</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: See inclusion criteria</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Success defined as dependent scrotal location and testis size equivalent to the contralateral mate, %: G1: 100 G2: 98</p> <p>Atrophy at 1-year follow-up, n: G1: 0 G2: 1</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
Author: Escarcega-Fujigaki et al., 2011	Groups: G1: Traditional surgical technique G2: Laparoscopy	Unilateral, n (%): 51 (81) Bilateral, n (%): 12 (19)	Immediate/short-term:
Country: Mexico	Inclusion criteria: • Diagnosed with palpable undescended testis needing surgical treatment	Palpability: NR	Testicular position: No difference between testicular position between groups post-operatively
Setting: Hospital	Exclusion criteria: See inclusion criteria	Testicle location: NR	Pain: Authors note that laparoscopy caused less pain when compared with the other technique in 80% of cases.
Enrollment period: August 2006 to March 2009	N at enrollment (N testes): G1: 33 (37) G2: 30 (38)	Other anomalies: NR	Adverse effects, n: Hematoma G1: 1 G2: 0
Design: Prospective cohort	N at follow-up (N testes): G1: 33 (37) G2: 30 (38)		Long-term: NR
Length of followup, median months: 18	Age at intervention, median years (range): 2.3 (1-10)		
	Sidedness, n (%): Left: 31 (49.2) Right: 44 (69.8)		
	Comorbidites, n (%): Hernia: G1: 23 (62.2) G2: 14 (36.8)		

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Ferro et al 1999</p> <p>Country: Italy</p> <p>Setting: Hospital</p> <p>Enrollment period: April 1997 to February 1998</p> <p>Design: RCT</p> <p>Length of followup: At least one month</p>	<p>Groups: G1: Open surgery only G2: Laparoscopy via Hasson technique and subsequent open surgery</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Impalpable testis based on clinical examination by surgeon • No other imaging studies done to locate the gonad • Testis remained impalpable under anesthesia <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Associated anomalies such as ambiguous genitalia, prune belly syndrome or genetic disorders <p>N at enrollment: G1: 30 G2: 31</p> <p>N at follow-up (N testes): G1: 24 G2: 19</p> <p>Age at intervention, mean months ± SD: G1: 37.7 ± 35.2 G2: 32.7 ± 29.7</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: See inclusion criteria</p> <p>Testicle location, n: G1: Truly abdominal: 17 Peeping: 4 Canalicular: 1 Interstitial or preperitoneal ectopic: 2 G2: Truly abdominal: 15 Peeping: 2 Canalicular: 0 Interstitial or preperitoneal ectopic: 2</p> <p>Other anomalies, n: No normal appearing gonad G1: 6 G2: 12</p>	<p>Immediate/short-term:</p> <p>Need for further surgical intervention, n: Recurrences in G1: 2/24 G2: 1/19 P>0.05</p> <p>Total operative time, mean mins ± SD: G1: 37.9 ± 9.6 G2: 50.5 ± 19.3 P=0.002</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Gheiler et al., 1997</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: January 1994 to March 1996</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean months (range): 12 (1 to 27)</p>	<p>Groups: G1: Jones approach G2: Standard inguinal orchiopexy</p> <p>Inclusion criteria: • Underwent orchiopexy for nonpalpable testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): G1: 19 G2: 10</p> <p>N at follow-up (N testes): G1: 19 G2: 10</p> <p>Age at intervention, mean yrs (range): 6 (0.9 to 17)</p> <p>Sidedness: NR</p> <p>Comorbidites: NR</p>	<p>Unilateral NR</p> <p>Bilateral: NR</p> <p>Palpability: See inclusion criteria</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Satisfactory scrotal position: G1: 19 G2: 8 (other two were in low inguinal location)</p> <p>Satisfactory result: G1: 18 G2: 7</p> <p>Adverse effects: Testicular atrophy G1: 1 G2: 1 Both in patients whose testicular vessels were ligated</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Gilhooly et al., 1984</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: 1936 to 1968</p> <p>Design: Retrospective cohort</p> <p>Length of followup: NR</p>	<p>Groups: Treated for bilateral or unilateral cryptorchidism</p> <p>36 bilateral and 70 unilateral had unsuccessful hCG therapy preoperatively</p> <p>9 bilateral and 30 unilateral underwent orchiopexy without prior gonadotropin treatment</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Parents of children with cryptorchid testes who had orchiopexy completed surveys about children's outcomes <p>Exclusion criteria:</p> <ul style="list-style-type: none"> Patients with genetic disorders, multiple genitourinary anomalies, simple testicular ectopia, and migratory or retractile testes <p>N at enrollment: 800</p> <p>N at follow-up (N testes): 145 (190)</p> <p>Age at intervention, mean yrs (range):</p> <p>Fertile: Unilateral: 9.3 (4 to 17) Bilateral: 7.5 (3 to 11)</p> <p>Infertile: Unilateral: 9.3 (7 to 13) Bilateral: 8.5 (1 to 13)</p> <p>Sidedness, n (%): NR</p> <p>Comorbidities, n (%): NR</p>	<p>Unilateral, n (%): 100</p> <p>Bilateral, n (%): 45</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR</p> <p>Long-term:</p> <p>Paternity rate: 80% in unilateral group 35% (16/45) in bilateral patients</p> <p>Additional 10/20 unilateral and 12/29 bilateral had made no attempt at paternity</p> <p>No difference in rates between gonadotropin-treated and orchiopexy-along groups</p> <p>hCG + orchiopexy: unilateral: 80% paternity reported, 10% no paternity, 10% paternity not attempted bilateral: 36% paternity; 39% no paternity, 25% paternity not attempted</p> <p>orchiopexy only: unilateral: 80% paternity, 10% no paternity, 10% paternity not attempted bilateral: 33% paternity, 33% no paternity, 33% paternity not attempted</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Humphrey et al., 1998</p> <p>Country: UK</p> <p>Setting: Hospital</p> <p>Enrollment period: Over 30 months (unspecified)</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean years (range): G1: 2.5 (2-4) G2: 1.5 (0.5-3.5)</p>	<p>Groups: G0: Laparoscopy evaluation orchidopexy G2: Two-stage Fowler-Stephens procedure</p> <p>Inclusion criteria: • Undergoing evaluation for unilateral impalpable testis</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): G0: 48 (48)* G1: 10 (10) G2: 10 (10)</p> <p>N at follow-up (N testes): G0: 48 (48)* G1: 10 (10) G2: 10 (10)</p> <p>Age at intervention, mean years (range): 3.3 (1-9)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral, n (%): 48 (100)</p> <p>Bilateral, n: 0</p> <p>Palpability: See inclusion criteria</p> <p>Testicle location: Absent 28* Intra-abdominal 20</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Lower half of scrotum G1: 3 G2: 8 Upper half of scrotum G1: 6 G2: 2</p> <p>Adverse effects: Atrophy G1: 1 G2: 0 Technical failures G1: 0 G2: 0 Laparoscopy-related complications G1: 0 G2: 0</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Kim et al., 2010</p> <p>Country: South Korea</p> <p>Setting: Hospital</p> <p>Enrollment period: September 1996 to April 2008</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean months ± SD (range): 21.8 ± 20 (0.3 to 138.4)</p>	<p>Groups: G1: Primary laparoscopic orchiopexy G2: One-stage Fowler-Stephens laparoscopic orchiopexy G3: Two-stage Fowler-Stephens laparoscopic orchiopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Underwent laparoscopic orchiopexy for nonpalpable intra-abdominal testis during enrollment period <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment: 67 participants (86 testes) G1: 69 testes G2: 14 testes G3: 3 testes</p> <p>N at follow-up (N testes): 1 month: 67 participants (86 testes) G1: 69 testes G2: 14 testes G3: 3 testes</p> <p>Beyond 3 months: 48 participants (63 testes) G1: 49 testes G2: 11 testes G3: 3 testes</p> <p>Age at intervention, mean yrs ± SD (range): 2.4 ± 2.2 (0.5 to 9)</p> <p>Sidedness, n (%): Left: 16 (18.6) Right: 32 (37.2)</p> <p>Comorbidities: NR</p>	<p>Unilateral, n (%): 48 (55.8)</p> <p>Bilateral, n (%): 38 (44.2)</p> <p>Palpability: NR</p> <p>Testicle location, n (%): Within 3cm of internal ring: 63 (73.2) Beyond 3cm from internal ring: 14 (16.3) Peeping: 9 (10.5)</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term:</p> <p>Testicular position: Distance from internal ring, 1 month: G1: 57 (98.3) <3cm; 2 (100) ≥3cm; 9 (100) peeping G2: 5 (100) <3cm; 8 (88.9) ≥3cm; 0 peeping G3: 0 <3cm; 3 (100) ≥3cm; 0 peeping</p> <p>Distance from internal ring, beyond 3 months: G1: 42 (97.7) <3cm; 1 (100) ≥3cm; 5 (100) peeping G2: 3 (100) <3cm; 6 (75) ≥3cm; 0 peeping G3: 0 <3cm; .2 (66.7) ≥3cm; 0 peeping</p> <p>Location of the viable testis: G1: 39 (79.6) low; 9 (18.4) mid-high G2: 7 (63.6) low; 2 (18.2) mid-high G3: 2 low (66.7)</p> <p>Testicular survival rate beyond 3 months: G1: 48/49 (8) G2: 9/11 (81.8) G3: 2/3 (66.7) G2: 123</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Lintula et al., 2008</p> <p>Country: Finland</p> <p>Setting: Hospital</p> <p>Enrollment period: January 1992 to December 2004</p> <p>Design: Retrospective cohort</p> <p>Length of followup, median months (range): G1: 16 (12-72) G2: 30 (12-132)</p>	<p>Groups: G1: Laparoscopic orchidopexy G2: Open orchidopexy</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Patients with intra-abdominal testes who underwent either laparoscopic or open orchidopexy <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Testis that were palpable at any point • Atrophic, vanishing, or distal canalicular testicles <p>N at enrollment (N testes): G1: 16 (19) G2: 18 (18)</p> <p>N at follow-up (N testes): G1: 16 (18) G2: 17 (17)</p> <p>Age at intervention, yrs mean ± SD (range): G1: 2.5 ± 3.5 (1-13) G2: 2.5 ± 2.3 (1-10)</p> <p>Sidedness, n (%): Left: G1: 9 (56.3) G2: 7 (38.9) Right: G1: 4 (25.0) G2: 11 (61.1)</p> <p>Comorbidities, n: Previous laparoscopic Fowler-Stephens I procedure: G1: 2 G2: 0 Conversion from laparoscopic to open: G1: 1 G2: 0</p>	<p>Unilateral, n (%): G1: 13 (81.3) G2: 18 (100)</p> <p>Bilateral, n (%): G1: 3 (18.7) G2: 0</p> <p>Palpability, n (%): G1: 0 G2: 0</p> <p>Testicle location, n (%): Intra-abdominal: G1: 16 G2: 18 <1 cm from IIR: G1: 9 (47) G2: 13 (72) 1-4 cm from IIR: G1: 6 (32) G2: 2 (11) At the iliac vessels: G1: 4 (20) G2: 3 (17)</p> <p>Other anomalies, n (%): Processus vaginalis open G1: 16 (84) G2: 15 (83) Processus vaginalis closed G1: 3 (16) G2: 3 (17)</p>	<p>Immediate/short-term: Testicular size and appearance, n (%): Normal G1: 10 (55) G2: 9 (53) Small G1: 7 (39) G2: 7 (41) Atrophied G1: 1 (6) G2: 7 (6)</p> <p>Testicular position, n (%): Low scrotal G1: 12 (66) G2: 10 (59) Mid-scrotal G1: 4 (22) G2: 4 (23) High scrotal G1: 1 (6) G2: 1 (6) Inguinal canal G1: 0 G2: 2 (12) Vanished G1: 1 (6) G2: 0</p> <p>Need for further surgical intervention: Reoperation due to unacceptable position or atrophy, n (%): G1: 2 (11) G2: 3 (18)</p> <p>Adverse effects, n (%): Early readmission to the outpatient clinic: G1: 2 (11) G2: 1 (6) Minor postoperative complications: G1: 1 (6) scrotal wound infection G2: 1 (6) scrotal hematoma</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Moursy et al., 2011</p> <p>Country: Egypt</p> <p>Setting: Hospital</p> <p>Enrollment period: January 2005 to June 2009</p> <p>Design: Retrospective cohort</p> <p>Length of followup: Patients evaluated 3 months postoperatively and then every 6 months for 3 years Followup mean months (range): 34 (3-55)</p>	<p>Groups: G1: Low intra-abdominal testes managed by laparoscopic orchiopexy G2: High intra-abdominal testes managed by laparoscopic two-stage Fowler-Stephens or laparoscopic orchiectomy</p> <p>Inclusion criteria: • Nonpalpable testes</p> <p>Exclusion criteria: See inclusion criteria</p> <p>N at enrollment (N testes): 78 (88) G1: 33 testes G2: 45 testes</p> <p>N at follow-up (N testes): 66 (76) G1: 28 testes G2: 36 testes</p> <p>Age at intervention, median months (range): 16 (11-42)*</p> <p>Sidedness: NR</p> <p>Comorbidites: NR</p>	<p>Unilateral, n (%): 68 (87.2)</p> <p>Bilateral, n (%): 10 (12.8)</p> <p>Palpability: NR</p> <p>Testicle location: Intra-abdominal, low 33 Intra-abdominal, high 45</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: Testicular size and appearance: Normal sized and well positioned in scrotum, n testes (%) G1: 28 (100) G2: 32 (88.8)</p> <p>Adverse effects, n: Testicular displacement G1: 0 G2: 2 Testicular atrophy G1: 0 G2: 2 Port hernias requiring repair 3</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Okuyama et al., 1989</p> <p>Country: Japan</p> <p>Setting: Hospital</p> <p>Enrollment period: NR</p> <p>Design: Retrospective cohort</p> <p>Length of followup: Examination occurred when patients were 19-39 years old</p>	<p>Groups: G1a: Prepubertal (ages 2-5 years) bilateral orchiopexy G1b: Early pubertal (ages 9-12 years) bilateral orchiopexy G2a: Prepubertal unilateral orchiectomy for unilateral undescended testis G2b: Early pubertal unilateral orchiectomy for unilateral undescended testis G3a: Prepubertal unilateral orchiectomy for unilateral undescended testis that was grossly abnormal G3b: Early pubertal unilateral orchiectomy for unilateral undescended testis that was grossly abnormal G4: Had not undergone any surgical treatment for a unilateral undescended testis</p> <p>Inclusion criteria: See exclusion criteria</p> <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Underwent orchiopexy when 5-9 years of age • Retractable testis as determined in clinic by palpation and during Valsalva's maneuver • Those with a small testicle or dislocated testis at follow-up when 19-39 years old despite previous orchiopexy <p>N at enrollment: 274</p> <p>N at follow-up for sperm density: G1a: 46 G1b: 15</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR</p> <p>Long-term: Sperm Density Normal (%)</p> <p>G1a: 0 G1b: 0 G2a: 75 G2b: 61 G3a: 81 G3b: 70 G4: 42 Decreased (%)</p> <p>G1a: 24 G1b: 20 G2a: 20 G2b: 25 G3a: 13 G3b: 20 G4: 45</p> <p>No sperm (%)</p> <p>G1a: 76 G1b: 80 G2a: 5 G2b: 14 G3a: 6 G3b: 10 G4: 13</p> <p>P<0.001 between group 1 or 2 and group 3. P<0.05 between group 2 or 3 and group 4.</p> <p>Sperm motility Normal (%)</p> <p>G1a: 11 G1b: 0 G2a: 73 G2b: 65 G3a: 80 G3b: 78 G4: 58</p> <p>Decreased (%)</p> <p>G1a: 56 G1b: 60 G2a: 21 G2b: 22 G3a: 20 G3b: 22 G4: 33</p> <p>Nonmotile (%)</p> <p>G1a: 33 G1b: 40 G2a: 6</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
	G2a: 121 G2b: 28 G3a: 16 G3b: 10 G4: 38 N at follow-up for sperm motility: G1a: 9 G1b: 5 G2a: 116 G2b: 23 G3a: 15 G3b: 9 G4: 33 Age at follow-up, mean yrs (range): G1a & G1b: 25.7 (18-39) G2a & G2b: 26.9 (18-37) G3a & G3b: 25.0 (19-33) G4: 27.7 (21-36) Sidedness: NR Comorbidites: NR		G2b: 13 G3a: 0 G3b: 0 G4: 9 P<0.001 between group 1 or 2 and group 3. P<0.05 between group 2 or 3 and group 4.

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Radmayr et al., 2003</p> <p>Country: Austria</p> <p>Setting: Hospital</p> <p>Enrollment period: 1992 to September 2000</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean yrs (range) 6.2 (2-10)</p>	<p>Groups: G1: Direct laparoscopic orchiopexy (intraabdominal testes) G2: 2-stage Fowler Stephens orchiopexy (intraabdominal testes) G3: Classic orchiopexy (inguinal testes)</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> Underwent laparoscopic evaluation for nonpalpable testes <p>Exclusion criteria:</p> <ul style="list-style-type: none"> Primarily impalpable testes but inguinal position located under general anesthesia <p>N testes at enrollment: G1: 28 G2: 29 G3: 36</p> <p>N testes at follow-up: G1: 28 G2: 29 G3: 36</p> <p>Age at intervention, mean yrs (range): 1.9 (0.8 – 12)</p> <p>Sidedness: NR</p> <p>Comorbidity: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR</p> <p>Long-term: Testicular size and appearance: G1: mean volume 1.5 ml (range 1.1 -1.9); 0% atrophic G2: mean volume 1.8 ml (range 0.9-2.4) ; 2% atrophic G3: NR Testicular position: G1: 28 (100%) normal testes, 0% atrophic; described as in a dependent scrotal position with normal consistency, comparable in size to contralateral gonad G2: 27 (93.1%) normal testes, 2 (6.9%) atrophic G3: described as in a dependent scrotal position with normal consistency, comparable in size to contralateral gonad</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Stec et al., 2009</p> <p>Country: US</p> <p>Setting: Hospital</p> <p>Enrollment period: 1998 to 2007</p> <p>Design: Retrospective cohort</p> <p>Length of followup, mean months (range): 16 (6 – 93)</p>	<p>Groups: G1: One-stage laparoscopic orchiopexy G2: One-stage open orchiopexy G3: one-stage laparoscopic Fowler-Stephens orchiopexy G4: One-stage open Fowler-Stephens Orchiopexy G5: Two-stage Fowler-Stephens orchiopexy with laparoscopic stages 1 and 2 G6: Two-stage Fowler-Stephens orchiopexy with laparoscopic stage 1 and open stage 2 G7: Two-stage Fowler-Stephens orchiopexy with open stages 1 and 2 Choice of open vs. laparoscopic technique was up to surgeon depending on comfort level with techniques. Decision to do FSO vs. 1-stage orchiopexy was based on patient anatomy (high testes or noticeable short vessels had FSO).</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Orchiopexy • Testes thought to be of sufficient size and texture that they could grow • Intraabdominal testis <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Atrophic testis • Orchiectomy at surgery • Incomplete medical records • Less than 6 months of followup <p>N at enrollment (N testes): G1: 32 G2: 60 G3: 8 G4: 19 G5: 11 G6: 21 G7: 5</p>	<p>Unilateral, n (%): 116 across all groups</p> <p>Bilateral, n (%): 20 of 136 across all groups</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: Testicle location, n (%): Successful, defined as testis brought down into the scrotum, which was in a dependent location, normal in consistency, and of a size comparable to the contralateral testis at follow-up, number: G1: 31 (96.9) G2: 51 (85.0) G3: 5 (62.5) G4: 12 (63.2) G5: 8 (72.7) G6: 13 (61.9) G7: 4 (80.0)</p> <p>Failure, defined as a testis that was brought down into the scrotum but had failed to grow, become atrophic compared to contralateral testis, or not dependent in the scrotum at followup, number: G1: 1 (3.1) G2: 9 (15.1) G3: 3 (37.5) G4: 7 (36.8) G5: 3 (27.3) G6: 8 (38.1) G7: 1 (20.0)</p> <p>Patent processus vaginalis was insignificant to success on multiple variable logistic regression analysis.</p> <p>One and 2-stage FSO had an OR that significantly correlated with worse outcome compared to 1-stage abdominal orchiopexy (OR 0.24, p=0.007 and 0.29, p=0.019, respectively, table 2).</p> <p>Long-term: NR</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
	N at follow-up: G1: 32 G2: 60 G3: 8 G4: 19 G5: 11 G6: 21 G7: 5		
	Age at intervention, median months (range): 12 (3 to 167)		
	Sidedness: NR		
	Comorbidites: NR		

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Author: Yavetz et al, 1992</p> <p>Country: Israel</p> <p>Setting: Outpatient infertility clinic</p> <p>Enrollment period: 1979 to 1990</p> <p>Design: Retrospective cohort</p> <p>Length of followup: NR</p>	<p>Groups: G1: Bilateral orchidopexy G2: Unilateral orchidopexy G3: Successful hormonal therapy G4: Late spontaneous descent G5: Untreated cryptorchid patients G6: Fertile men</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • Cryptorchidism in medical history for groups G1-G5 • Fertile men participating in in-vitro fertilization-embryo transfer for G6 <p>Exclusion criteria:</p> <ul style="list-style-type: none"> • Additional pathology that may have interfered with fertility, such as varicocele, inguinal hernia repair, and previous mumps orchiditis <p>N at enrollment: G1: 40 G2: 51 G3: 24 G4: 6 G5: 13 G6: 105</p> <p>N at follow-up: G1: 40 G2: 51 G3: 24 G4: 6 G5: 13 G6: 105</p> <p>N at follow-up for hormone levels: G1: 33 G2: 51 G3: 24 G4: 6 G5: 13 G6: 105</p> <p>Age at intervention, mean yrs ± SD (range): G1: 11.6±4.0 (1-21) G2: 10.8±4.1 (2-23) G3: NR G4: NR G5: NR G6: NR</p>	<p>Unilateral: NR</p> <p>Bilateral: NR</p> <p>Palpability: NR</p> <p>Testicle location: NR</p> <p>Other anomalies: NR</p>	<p>Immediate/short-term: NR</p> <p>Long-term: Testicular position, n (%): G1: 11 (30) with abnormal position of the testes G2: 13 (25.5) with abnormal position of the testes G3: NR G4: NR G5: one testis absent in 7 (53.8) patents, one testis in the inguinal canal in 6 (46.2) patients G6: 6 (46.2) patients</p> <p>Endocrine function: FSH (mIU/ml±SD) G1: 24.6±1.4, p<0.001 G2: 9.4±1.3, p<0.001 G3: 14.3±1.6, p<0.001 G4: 25.7±1.4, p<0.001 G5: 12.6±1.1, p<0.001 G6: 4.2±0.5</p> <p>LH (mIU/ml±SD) G1: 6.2±0.8 G2: 3.4±0.7 G3: 2.6±0.6 G4: 5.9±0.9 G5: 2.3±0.5 G6: 4.2±0.6</p> <p>Testosterone (ng/ml±SD) G1: 6.0±2.3 G2: 5.5±2.3 G3: 6.4±1.9 G4: 4.8±1.0 G5: 6.0±2.0 G6: 5.6±0.9</p> <p>Semen volume, ml±SD G1: 3.0±1.7 G2: 3.4±1.7 G3: 3.1±1.8 G4: 3.1±1.5 G5: 2.8±0.9 G6: 2.8±1.2</p> <p>Sperm concentration (millions/ml ±SD) G1: 0.3±1.9 G2: 17.0±2.9 G3: 15.1±5.8 G4: 25.5±6.1 G5: 16.6±4.6 G6: 90.1±3.3</p>

Table D-7. Evidence tables for studies assessing surgical treatment (continued)

Study Description	Intervention & Population	Baseline Characteristics	Intervention Outcomes
<p>Sidedness: NR</p> <p>Comorbidities NR</p>			<p>All groups G1-G5 $p < 0.001$ compared to G6</p> <p>Total sperm count (millions\pmSD) G1: 1 ± 1.8, $p < 0.001$ G2: 50 ± 5.0, $p < 0.001$ G3: 43 ± 9.1, $p < 0.01$ G4: 96 ± 9.9, $p < 0.05$ G5: 40 ± 7.2, $p < 0.05$ G6: 230 ± 5.2</p> <p>Sperm motility (%\pmSD) G1: $8.4\% \pm 17.2$, $p < 0.001$ G2: $57.2\% \pm 21.4$, $p < 0.001$ G3: $27.2\% \pm 20.8$, $p < 0.001$ G4: $23.7\% \pm 18.1$ G5: $35.0\% \pm 22.1$, $p < 0.05$ G6: $52.3\% \pm 9.2$</p> <p>Degree of sperm motility (range 1-4\pmSD) G1: 0.93 ± 1.37, $p < 0.001$ G2: 2.49 ± 0.94, $p < 0.001$ G3: 1.55 ± 1.25, $p < 0.001$ G4: 2.57 ± 0.70, $p < 0.05$ G5: 2.55 ± 1.25, $p < 0.05$ G6: 3.53 ± 0.53</p> <p>Sperm morphology, (% normal forms\pmSD) G1: $9.0\% \pm 16.9$, $p < 0.001$ G2: $38.1\% \pm 23.2$, $p < 0.01$ G3: $29.6\% \pm 25.4$, $p < 0.05$ G4: $27.8\% \pm 24.5$, $p < 0.05$ G5: $45.6\% \pm 29.3$ G6: $51.8\% \pm 11.5$</p>

Appendix E. Quality of the Literature

Table E-1. QUADAS-2 evaluation form

Table E-2. QUADAS-2 assessments of ultrasound accuracy studies

Table E-3. QUADAS-2 assessments of MRI accuracy studies

Table E-4. QUADAS-2 assessments of other accuracy technique studies

Table E-5. ROB and quality scores of ultrasound accuracy studies

Table E-6. ROB and quality scores of MRI accuracy studies

Table E-7. ROB and quality scores of other accuracy technique studies

Table E-8. The Cochrane Risk of Bias Tool for Randomized Controlled Trials

Table E-9. Quality ratings for randomized control trials included in KQ2

Table E-10. Quality ratings for randomized control trials included in KQ3

Table E-11. Quality ratings for cohort studies included in KQ1b

Table E-12. Quality ratings for cohort studies included in KQ2

Table E-13. Quality ratings for cohort studies included in KQ3

The Quality Assessment of Diagnostic Accuracy Studies-Revised¹ (QUADAS-2) tool was used to assess the quality of studies included in KQ1a. We constructed an evaluation form (Table E-1) using the criteria outlined in the QUADAS-2 and completed one form for each technique assessed by studies included in our review. Each individual item could receive an assessment of yes, no, or unclear. Some included studies analyzed more than one imaging technique; in these instances, a separate evaluation form was completed for each technique.

Two authors independently completed evaluation forms for each study. Discrepancies were discussed and adjudicated by the two authors and the methods lead. The results of the evaluations of each study are presented below (Tables E-2 - 4), separated by imaging technique.

Table E-1. QUADAS-2 evaluation form

Domain/question	Yes/No/Unclear	Comments
Patient Selection		
1. Was a consecutive or random sample of patients enrolled?		
2. Was a case-control design avoided?		
3. Did the study avoid inappropriate exclusions?		
Index Test		
4. Were the index test results interpreted without knowledge of the results of the reference standard?		
5. If a threshold was used, was it pre-specified?		
Reference Standard		
6. Is the reference standard likely to correctly classify the target condition?		
7. Were the reference standard results interpreted without knowledge of the results of the index test?		
Flow and Timing		
8. Was there an appropriate interval between index tests and reference standard?		
9. Did all patients receive a reference standard?		
10. Did all patients receive the same reference standard?		
11. Were all patients included in the analysis?		

Comments:

Table E-2. QUADAS-2 assessments of ultrasound accuracy studies

Study	Patient Selection			Index Test		Reference Standard		Flow and Timing			
	Consecutive or random sample	Non-case-control	Avoid exclusions	Knowledge of standard	Pre-specified threshold	Likely to correctly classify the target condition	Knowledge of index test	Appropriate interval between tests	All receive standard	Same reference standard	All patients analyzed
Al-Shareef et al., 1996 ²	Y	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Cain et al., 1996 ³	Y	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Guvenc et al., 2005 ⁴	N	Y	Y	Y	Y	Y	N	N	Y	N	Y
Kanemoto et al., 2005 ⁵	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Kullendorf et al., 1985 ⁶	Y	Y	Y	Y	Y	Y	U	Y	Y	Y	Y
Maghnie et al., 1994 ⁷	N	Y	Y	Y	Y	Y	Y	U	Y	Y	N
Malone et al., 1985 ⁸	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Nijs et al., 2007 ⁹	N	Y	Y	Y	Y	Y	N	U	Y	Y	N
Yeung et al., 1999 ¹⁰	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y

Y= yes; N = no; U = unclear

Table E-3. QUADAS-2 assessments of MRI accuracy studies

Study	Patient Selection			Index Test		Reference Standard		Flow and Timing			
	Consecutive or random sample	Non-case-control	Avoid exclusions	Knowledge of standard	Pre-specified threshold	Likely to correctly classify the target condition	Knowledge of index test	Appropriate interval between tests	All receive standard	Same reference standard	All patients analyzed
Al-Shareef et al., 1996 ²	Y	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Kanemoto et al., 2005 ⁵	N	Y	Y	Y	Y	Y	N	U	Y	Y	N
Kantarci et al., 2010 ¹¹	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kato et al., 2011 ¹²	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Kier et al., 1988 ¹³	N	Y	Y	N	Y	Y	N	U	Y	Y	Y
Lam et al., 1998 ¹⁴	Y	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Maghnie et al., 1994 ⁷	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Miyano et al., 1991 ¹⁵	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Siemer et al., 2000 ¹⁶	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Yeung et al., 1999 ¹⁰	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y

Y= yes; N = no; U = unclear

Table E-4. QUADAS-2 assessments of other accuracy technique studies

Study Technique	Patient Selection			Index Test		Reference Standard		Flow and Timing			
	Consecutive or random sample	Non-case-control	Avoid exclusions	Knowledge of standard	Pre-specified threshold	Likely to correctly classify the target condition	Knowledge of index test	Appropriate interval between tests	All receive standard	Same reference standard	All patients analyzed
Desireddi et al., 2008 ¹⁷ MRI + MRA/V	N	Y	Y	Y	Y	Y	Y	U	Y	N	N
Green, 1985 ¹⁸ CT Scan	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Lam et al., 2001 ¹⁹ MRV	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Lam et al., 1998 ¹⁴ MRA	Y	Y	Y	Y	Y	Y	N	U	Y	Y	Y
Yeung et al., 1999 ¹⁰ MRA	N	Y	Y	Y	Y	Y	N	U	Y	Y	Y

Y= yes; N = no; U = unclear

Per the methods of the QUADAS-2, a risk of bias (ROB) score was calculated for each of the four domains assessed in the evaluation of each study: patient selection, index test (imaging technique), reference standard (surgical verification technique), and flow and timing. Each domain could receive a rating of high, low, or unclear ROB.

For the patient selection, index test, and flow and timing domains, a “Yes” response to all individual items was necessary to receive a low ROB assessment. One answer of “No” or “Unclear” for any individual item within these three domains resulted in an assessment of high ROB.

The QUADAS-2 ROB assessments were then converted into the AHRQ quality standards of good, fair, and poor using the following criteria:

- **Good quality = an assessment of low ROB for all four domains**
- **Fair quality = an assessment of high ROB for one domain**
- **Poor quality = an assessment of high ROB for two or more domains**

The quality and ROB assessments for each study are presented below (Tables E-5 - 7), separated by imaging technique.

Table E-5. ROB and quality scores of ultrasound accuracy studies

Study	Quality Score	Patient Selection	Imaging	Surgery	Flow and Timing
Al-Shareef et al., 1996 ²	Fair	L	L	L	H
Cain et al., 1996 ³	Fair	L	L	L	H
Guvenc et al., 2005 ⁴	Poor	H	L	L	H
Kanemoto et al., 2005 ⁵	Poor	H	L	L	H
Kullendorf et al., 1985 ⁶	Good	L	L	L	L
Maghnie et al., 1994 ⁷	Poor	H	L	L	H
Malone et al., 1985 ⁸	Poor	H	L	L	H
Nijs et al., 2007 ⁹	Poor	H	L	L	H
Yeung et al., 1999 ¹⁰	Poor	H	L	L	H

H = high; L = low

Table E-6. ROB and quality scores of MRI accuracy studies

Study	Quality Score	Patient Selection	Imaging	Surgery	Flow and Timing
Al-Shareef et al., 1996 ²	Fair	L	L	L	H
Kanemoto et al., 2005 ⁵	Poor	H	L	L	H
Kantarci et al., 2010 ¹¹	Fair	H	L	L	L
Kato et al., 2011 ¹²	Poor	H	L	L	H
Kier et al., 1988 ¹³	Poor	H	H	L	H
Lam et al., 1998 ¹⁴	Fair	L	L	L	H
Maghnie et al., 1994 ⁷	Poor	H	L	L	H
Miyano et al., 1991 ¹⁵	Poor	H	L	L	H
Siemer et al., 2000 ¹⁶	Poor	H	L	L	H
Yeung et al., 1999 ¹⁰	Poor	H	L	L	H

H = high; L = low

Table E-7. ROB and quality scores of other accuracy technique studies

Study Technique	Quality Score	Patient Selection	Imaging	Surgery	Flow and Timing
Desireddi et al., 2008 ¹⁷ MRI + MRA/V	Poor	H	L	L	H
Green, 1985 ¹⁸ CT Scan	Poor	H	L	L	H
Lam et al., 2001 ¹⁹ MRV	Poor	H	L	L	H
Lam et al., 1998 ¹⁴ MRA	Fair	L	L	L	H
Yeung et al., 1999 ¹⁰ MRA	Poor	H	L	L	H

H = high; L = low

Table E-8. The Cochrane Risk of Bias Tool for Randomized Controlled Trials

RANDOM SEQUENCE GENERATION Selection bias (biased allocation to interventions) due to inadequate generation of a randomised sequence.	
<p>Criteria for a judgment of 'Low risk' of bias.</p>	<p>The investigators describe a random component in the sequence generation process such as:</p> <ul style="list-style-type: none"> • Referring to a random number table; • Using a computer random number generator; • Coin tossing; • Shuffling cards or envelopes; • Throwing dice; • Drawing of lots; • Minimization*. <p>*Minimization may be implemented without a random element, and this is considered to be equivalent to being random.</p>
<p>Criteria for the judgment of 'High risk' of bias.</p>	<p>The investigators describe a non-random component in the sequence generation process. Usually, the description would involve some systematic, non-random approach, for example:</p> <ul style="list-style-type: none"> • Sequence generated by odd or even date of birth; • Sequence generated by some rule based on date (or day) of admission; • Sequence generated by some rule based on hospital or clinic record number. <p>Other non-random approaches happen much less frequently than the systematic approaches mentioned above and tend to be obvious. They usually involve judgement or some method of non-random categorization of participants, for example:</p> <ul style="list-style-type: none"> • Allocation by judgement of the clinician; • Allocation by preference of the participant; • Allocation based on the results of a laboratory test or a series of tests; • Allocation by availability of the intervention.
<p>Criteria for the judgment of 'Unclear risk' of bias.</p>	<p>Insufficient information about the sequence generation process to permit judgement of 'Low risk' or 'High risk'.</p>

Table E-8. The Cochrane Risk of Bias Tool for Randomized Controlled Trials (continued)

ALLOCATION CONCEALMENT	
Selection bias (biased allocation to interventions) due to inadequate concealment of allocations prior to assignment.	
Criteria for a judgment of 'Low risk' of bias.	<p>Participants and investigators enrolling participants could not foresee assignment because one of the following, or an equivalent method, was used to conceal allocation:</p> <ul style="list-style-type: none"> • Central allocation (including telephone, web-based and pharmacy-controlled randomization); • Sequentially numbered drug containers of identical appearance; • Sequentially numbered, opaque, sealed envelopes.
Criteria for the judgment of 'High risk' of bias.	<p>Participants or investigators enrolling participants could possibly foresee assignments and thus introduce selection bias, such as allocation based on:</p> <ul style="list-style-type: none"> • Using an open random allocation schedule (e.g. a list of random numbers); • Assignment envelopes were used without appropriate safeguards (e.g. if envelopes were unsealed or non-opaque or not sequentially numbered); • Alternation or rotation; • Date of birth; • Case record number; • Any other explicitly unconcealed procedure.
Criteria for the judgment of 'Unclear risk' of bias.	<p>Insufficient information to permit judgement of 'Low risk' or 'High risk'. This is usually the case if the method of concealment is not described or not described in sufficient detail to allow a definite judgement – for example if the use of assignment envelopes is described, but it remains unclear whether envelopes were sequentially numbered, opaque and sealed.</p>
SELECTIVE REPORTING	
Reporting bias due to selective outcome reporting.	
Criteria for a judgment of 'Low risk' of bias.	<p>Any of the following:</p> <ul style="list-style-type: none"> • The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way; • The study protocol is not available but it is clear that the published reports include all expected outcomes, including those that were pre-specified (convincing text of this nature may be uncommon).
Criteria for the judgment of 'High risk' of bias.	<p>Any one of the following:</p> <ul style="list-style-type: none"> • Not all of the study's pre-specified primary outcomes have been reported; • One or more primary outcomes is reported using measurements, analysis methods or subsets of the data (e.g. subscales) that were not pre-specified; • One or more reported primary outcomes were not pre-specified (unless clear justification for their reporting is provided, such as an unexpected adverse effect); • One or more outcomes of interest in the review are reported incompletely so that they cannot be entered in a meta-analysis; • The study report fails to include results for a key outcome that would be expected to have been reported for such a study.
Criteria for the judgment of 'Unclear risk' of bias.	<p>Insufficient information to permit judgement of 'Low risk' or 'High risk'. It is likely that the majority of studies will fall into this category.</p>

Table E-8. The Cochrane Risk of Bias Tool for Randomized Controlled Trials (continued)

OTHER BIAS Bias due to problems not covered elsewhere in the table.	
Criteria for a judgment of 'Low risk' of bias.	The study appears to be free of other sources of bias.
Criteria for the judgment of 'High risk' of bias.	There is at least one important risk of bias. For example, the study: <ul style="list-style-type: none"> • Had a potential source of bias related to the specific study design used; or • Has been claimed to have been fraudulent; or • Had some other problem.
Criteria for the judgment of 'Unclear risk' of bias.	There may be a risk of bias, but there is either: <ul style="list-style-type: none"> • Insufficient information to assess whether an important risk of bias exists; or • Insufficient rationale or evidence that an identified problem will introduce bias.
BLINDING OF PARTICIPANTS AND PERSONNEL Performance bias due to knowledge of the allocated interventions by participants and personnel during the study.	
Criteria for a judgment of 'Low risk' of bias.	Any one of the following: <ul style="list-style-type: none"> • No blinding or incomplete blinding, but the review authors judge that the outcome is not likely to be influenced by lack of blinding; • Blinding of participants and key study personnel ensured, and unlikely that the blinding could have been broken.
Criteria for the judgment of 'High risk' of bias.	Any one of the following: <ul style="list-style-type: none"> • No blinding or incomplete blinding, and the outcome is likely to be influenced by lack of blinding; • Blinding of key study participants and personnel attempted, but likely that the blinding could have been broken, and the outcome is likely to be influenced by lack of blinding.
Criteria for the judgment of 'Unclear risk' of bias.	Any one of the following: <ul style="list-style-type: none"> • Insufficient information to permit judgment of 'Low risk' or 'High risk'; • The study did not address this outcome.

Table E-8. The Cochrane Risk of Bias Tool for Randomized Controlled Trials (continued)

BLINDING OF OUTCOME ASSESSMENT	
Detection bias due to knowledge of the allocated interventions by outcome assessors.	
Criteria for a judgment of 'Low risk' of bias.	Any one of the following: <ul style="list-style-type: none"> No blinding of outcome assessment, but the review authors judge that the outcome measurement is not likely to be influenced by lack of blinding; Blinding of outcome assessment ensured, and unlikely that the blinding could have been broken.
Criteria for the judgment of 'High risk' of bias.	Any one of the following: <ul style="list-style-type: none"> No blinding of outcome assessment, and the outcome measurement is likely to be influenced by lack of blinding; Blinding of outcome assessment, but likely that the blinding could have been broken, and the outcome measurement is likely to be influenced by lack of blinding.
Criteria for the judgment of 'Unclear risk' of bias.	Any one of the following: <ul style="list-style-type: none"> Insufficient information to permit judgment of 'Low risk' or 'High risk'; The study did not address this outcome.
INCOMPLETE OUTCOME DATA	
Attrition bias due to amount, nature or handling of incomplete outcome data.	
Criteria for a judgment of 'Low risk' of bias.	Any one of the following: <ul style="list-style-type: none"> No missing outcome data; Reasons for missing outcome data unlikely to be related to true outcome (for survival data, censoring unlikely to be introducing bias); Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups; For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk not enough to have a clinically relevant impact on the intervention effect estimate; For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes not enough to have a clinically relevant impact on observed effect size; Missing data have been imputed using appropriate methods.
Criteria for the judgment of 'High risk' of bias.	Any one of the following: <ul style="list-style-type: none"> Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups; For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk enough to induce clinically relevant bias in intervention effect estimate; For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes enough to induce clinically relevant bias in observed effect size; 'As-treated' analysis done with substantial departure of the intervention received from that assigned at randomization; Potentially inappropriate application of simple imputation.
Criteria for the judgment of 'Unclear risk' of bias.	Any one of the following: <ul style="list-style-type: none"> Insufficient reporting of attrition/exclusions to permit judgement of 'Low risk' or 'High risk' (e.g. number randomized not stated, no reasons for missing data provided); The study did not address this outcome.

Thresholds for converting the Cochrane Risk of Bias tool to AHRQ standards (good, fair, and poor):

Good quality: All criteria met (i.e. low for each domain)

Using the Cochrane ROB tool, it is possible for a criterion to be met even when the element was technically not part of the method. For instance, a judgment that knowledge of the allocated interventions was adequately prevented can be made even if the study was not blinded, if EPC team members judge that the outcome and the outcome measurement are not likely to be influenced by lack of blinding.

Fair quality: One criterion not met (i.e. high risk of bias for one domain) or two criteria unclear, and the assessment that this was **unlikely** to have biased the outcome, and there is no known important limitation that could invalidate the results

Poor quality: One criterion not met (i.e. high risk of bias for one domain) or two criteria unclear, and the assessment that this was **likely** to have biased the outcome, and there are important limitations that could invalidate the results

Poor quality: Two or more criteria listed as high or unclear risk of bias

Table E-9. Quality ratings for randomized control trials included in KQ2

Study	Quality rating	Random sequence generation	Allocation concealment	Selective reporting	Other sources of bias	Blinding (participants and personnel)	Blinding (outcome assessment)	Incomplete outcome data
Key Question 2: Effectiveness of hormone therapy for the treatment of cryptorchidism								
Bertelloni et al., 2001 ²⁰	Poor	H	U	L	U	H	H	L
Bica and Hadziselimovic, 1992 & 1993 ²¹⁻²²	Poor	U	U	L	U	L	H	L
Christiansen et al., 1988 & 1992 ²³⁻²⁴	Fair	L	L	L	H	L	L	L
De Muinck Keizer-Schrama and Hazebroek et al., 1986-1987 ²⁵⁻²⁷	Poor	U	U	L	U	L	L	L
Forest et al., 1988 ²⁸	Poor	H	H	L	H	H	H	L
Hagberg and Westphal, 1982 ²⁹	Poor	U	U	L	U	L	L	L
Hesse and Fischer, 1988 ³⁰	Poor	H	H	L	U	L	L	L
Karpe et al., 1983 ³¹	Poor	U	U	L	L	L	L	L
Olsen et al., 1992 ³²	Fair	L	L	L	L	L	L	H
Rajfer et al., 1986 ³³	Good	L	L	L	L	L	L	L
Wit et al., 1986 ³⁴	Poor	U	U	L	L	L	L	L

Table E-10. Quality ratings for randomized control trials included in KQ3

Key Question 3: Effectiveness of surgical therapies for the treatment of cryptorchidism								
Study	Quality rating	Random sequence generation	Allocation concealment	Selective reporting	Other sources of bias	Blinding (participants and personnel)	Blinding (outcome assessment)	Incomplete outcome data
Abolyosr, 2006 ³⁵	Poor	H	H	H	L	H	H	U
Arda and Ersoy, 2001 ³⁶	Poor	H	H	U	L	L	H	L
Ferro et al., 1999 ³⁷	Good	L	L	L	L	L	L	L

H = high; L = low; U = unclear

Newcastle-Ottawa Quality Assessment Form for Cohort Studies

Note: A study can be given a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability.

Selection

- 1) Representativeness of the exposed cohort
 - a) Truly representative **(one star)**
 - b) Somewhat representative **(one star)**
 - c) Selected group
 - d) No description of the derivation of the cohort
- 2) Selection of the non-exposed cohort
 - a) Drawn from the same community as the exposed cohort **(one star)**
 - b) Drawn from a different source
 - c) No description of the derivation of the non exposed cohort
- 3) Ascertainment of exposure
 - a) Secure record (e.g., surgical record) **(one star)**
 - b) Structured interview **(one star)**
 - c) Written self report
 - d) No description
 - e) Other
- 4) Demonstration that outcome of interest was not present at start of study
 - a) Yes **(one star)**
 - b) No

Comparability

- 1) Comparability of cohorts on the basis of the design or analysis controlled for confounders
 - a) The study controls for age, sex and marital status **(one star)**
 - b) Study controls for other factors (list) _____ **(one star)**
 - c) Cohorts are not comparable on the basis of the design or analysis controlled for confounders

Outcome

- 1) Assessment of outcome
 - a) Independent blind assessment **(one star)**
 - b) Record linkage **(one star)**
 - c) Self report
 - d) No description
 - e) Other
- 2) Was follow-up long enough for outcomes to occur
 - a) Yes **(one star)**
 - b) No

Indicate the median duration of follow-up and a brief rationale for the assessment above: _____

- 3) Adequacy of follow-up of cohorts
 - a) Complete follow up- all subject accounted for **(one star)**
 - b) Subjects lost to follow up unlikely to introduce bias- number lost less than or equal to 20% or description of those lost suggested no different from those followed. **(one star)**
 - c) Follow up rate less than 80% and no description of those lost
 - d) No statement

Thresholds for converting the Newcastle-Ottawa scales to AHRQ standards (good, fair, and poor):

Good quality: 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain

Fair quality: 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain

Poor quality: 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain

Table E-11. Quality ratings for cohort studies included in KQ1b

Citation	Quality rating	Selection (0-4 stars)				Comparability (n/a, 0-2 stars)	Outcome (0-3 stars)		
		Representativeness of exposed cohort	Selection of non exposed	Ascertainment of exposure	Outcome not present at start of study	Comparability of cohorts	Assess-ment	Long enough followup	Adequacy of follow up
Davenport et al., 1995 ³⁸	Poor	b)somewhat representative	a)drawn from same community	a)secure record	a) yes	c) no	b)record linkage	a) yes	a)complete followup
Merksz et al., 1992 ³⁹	Fair	b)somewhat representative	a)drawn from same community	a)secure record	b) no	b) other	b)record linkage	a) yes	a)complete followup

Table E-12. Quality ratings for cohort studies included in KQ2

Citation	Quality rating	Selection (0-4 stars)				Comparability (n/a, 0-2 stars)	Outcome (0-3 stars)		
		Representativeness of exposed cohort	Selection of non exposed	Ascertainment of exposure	Outcome not present at start of study	Comparability of cohorts	Assess-ment	Long enough followup	Adequacy of follow up
Aycan et al., 2006 ⁴⁰	Good	b)somewhat representative	a)drawn from same community	a)secure record	a) yes	a) yes	a)independent blind assessment	a) yes	a)complete followup
Esposito et al., 2003 ⁴¹	Poor	d) no description	a)drawn from same community	d)no description	a) yes	c) no	a)independent blind assessment	a) yes	a)complete followup
Hadziselimovic and Herzog, 1997 & 2008 ^{42,43}	Good	c)selected group	a)drawn from same community	a)secure record	a) yes	a) yes	a)independent blind assessment	a) yes	a)complete followup

Table E-13. Quality ratings for cohort studies included in KQ3

Citation	Quality rating	Selection (0-4 stars)				Comparability (n/a, 0-2 stars)	Outcome (0-3 stars)		
		Representativeness of exposed cohort	Selection of non exposed	Ascertainment of exposure	Outcome not present at start of study	Comparability of cohorts	Assessment	Long enough followup	Adequacy of follow up
Al-Mandil et al., 2008 ⁴⁴	Good	b) somewhat representative	a) drawn from same community	a) secure record	a) yes	a) yes	a) independent blind assessment	a) yes	d) no statement
Anousskasis et al., 1983 ⁴⁵	Good	b) somewhat representative	a) drawn from same community	a) secure record	a) yes	a) yes	a) independent blind assessment	a) yes	d) no statement
Baker et al., 2001 ⁴⁶	Poor	b) somewhat representative	a) drawn from same community	a) secure record	a) yes	c) no	a) independent blind assessment	a) yes	c) >80%
Chandrasekharam, 2005 ⁴⁷	Poor	b) somewhat representative	a) drawn from same community	d) no description	a) yes	a) yes	d) no description	b) no	d) no statement
Chang et al., 2001 ⁴⁸	Poor	c) selected group	a) drawn from same community	a) secure record	a) yes	c) no	a) independent blind assessment	b) no	c) >80%
Chang et al., 2008 ⁴⁹	Poor	c) selected group	a) drawn from same community	a) secure record	a) yes	c) no	a) independent blind assessment	a) yes	c) >80%
Cloutier et al., 2011 ⁵⁰	Poor	b) somewhat representative	a) drawn from same community	a) secure record	a) yes	b) other	a) independent blind assessment	b) no	d) no statement
Compoj et al., 2011 ⁵¹	Poor	b) somewhat representative	a) drawn from same community	a) secure record	a) yes	c) no	a) independent blind assessment	a) yes	c) >80%
Denes et al., 2008 ⁵²	Poor	d) no description	a) drawn from same community	d) no description	a) yes	c) no	d) no description	b) no	c) >80%

Table E-13. Quality ratings for cohort studies included in KQ3 (continued)

Citation	Quality rating	Selection (0-4 stars)				Comparability (n/a, 0-2 stars)	Outcome (0-3 stars)		
		Representativeness of exposed cohort	Selection of non exposed	Ascertainment of exposure	Outcome not present at start of study	Comparability of cohorts	Assessment	Long enough followup	Adequacy of follow up
Dhanani et al., 2004 ⁵³	Poor	d)no description	a)drawn from same community	a)secure record	a) yes	c) no	a)independent blind assessment	a) yes	c)>80%
Escarcega-Fujigaki et al., 2011 ⁵⁴	Fair	b)somewhat representative	a)drawn from same community	d)no description	b) no	b) other	c) self report	a) yes	c)>80%
Gheiler et al., 1997 ⁵⁵	Poor	b)somewhat representative	a)drawn from same community	a)secure record	a) yes	c) no	a)independent blind assessment	b) no	d)no statement
Gilhooly et al., 1984 ⁵⁶	Poor	d)no description	b)drawn from different source	d)no description	b) no	c) no	c)self report	b) no	d)no statement
Humphrey et al., 1998 ⁵⁷	Poor	d)no description	a)drawn from same community	d)no description	a) yes	c) no	d) no description	a) yes	d)no statement
Kim et al., 2010 ⁵⁸	Poor	d)no description	a)drawn from same community	a)secure record	a) yes	c) no	a)independent blind assessment	b) no	c)>80%
Lintula et al., 2008 ⁵⁹	Poor	a)truly representative	a)drawn from same community	a)secure record	a) yes	c) no	a)independent blind assessment	a) yes	b) <20%
Moursy et al., 2011 ⁶⁰	Poor	d)no description	a)drawn from same community	d)no description	a) yes	c) no	d) no description	a) yes	c)>80%
Okuyama et al., 1989 ⁶¹	Poor	d)no description	b)drawn from different source	d)no description	b) no	c) no	a)independent blind assessment	a) yes	d)no statement
Radmayr et al., 2003 ⁶²	Poor	d)no description	a)drawn from same community	d)no description	a) yes	c) no	d) no description	a) yes	d)no statement

Table E-13. Quality ratings for cohort studies included in KQ3 (continued)

Citation	Quality rating	Selection (0-4 stars)				Comparability (n/a, 0-2 stars)	Outcome (0-3 stars)		
		Representativeness of exposed cohort	Selection of non exposed	Ascertainment of exposure	Outcome not present at start of study	Comparability of cohorts	Assess-ment	Long enough followup	Adequacy of follow up
Stec et al., 2009 ⁶³	Good	b)somewhat representative	a)drawn from same community	a)secure record	a) yes	a & b	a)independent blind assessment	a) yes	c)>80%
Yavetz et al., 1992 ⁶⁴	Poor	d)no description	b)drawn from different source	d)no description	b) no	c) no	a)independent blind assessment	a) yes	d)no statement

References for Appendix E

1. Whiting PF, Rutjes AW, Westwood ME, et al. QUADAS-2: a revised tool for the quality assessment of diagnostic accuracy studies. *Ann Intern Med.* 2011 Oct 18;155(8):529-36.
2. Al-Shareef ZH, Al-Shlash S, Koneru SR, et al. Laparoscopic orchidopexy: one-stage alternative for non-palpable testes. *Ann R Coll Surg Engl.* 1996 Mar;78(2):115-8.
3. Cain MP, Garra B and Gibbons MD. Scrotal-inguinal ultrasonography: a technique for identifying the nonpalpable inguinal testis without laparoscopy. *J Urol.* 1996 Aug;156(2 Pt 2):791-4.
4. Guvenc BH, Sozubir S, Ekingen G, et al. Advantages of video-assisted approach in detecting epididymal anomalies and treatment of nonpalpable testis. *Urol Int.* 2005;74(2):127-34; discussion 134.
5. Kanemoto K, Hayashi Y, Kojima Y, et al. Accuracy of ultrasonography and magnetic resonance imaging in the diagnosis of non-palpable testis. *Int J Urol.* 2005 Jul;12(7):668-72.
6. Kullendorff CM, Hederstrom E and Forsberg L. Preoperative ultrasonography of the undescended testis. *Scand J Urol Nephrol.* 1985;19(1):13-5.
7. Maghnie M, Vanzulli A, Paesano P, et al. The accuracy of magnetic resonance imaging and ultrasonography compared with surgical findings in the localization of the undescended testis. *Arch Pediatr Adolesc Med.* 1994 Jul;148(7):699-703.
8. Malone PS and Guiney EJ. A comparison between ultrasonography and laparoscopy in localising the impalpable undescended testis. *Br J Urol.* 1985 Apr;57(2):185-6.
9. Nijs SM, Eijsbouts SW, Madern GC, et al. Nonpalpable testes: is there a relationship between ultrasonographic and operative findings? *Pediatr Radiol.* 2007 Apr;37(4):374-9.
10. Yeung CK, Tam YH, Chan YL, et al. A new management algorithm for impalpable undescended testis with gadolinium enhanced magnetic resonance angiography. *J Urol.* 1999 Sep;162(3 Pt 2):998-1002.
11. Kantarci M, Doganay S, Yalcin A, et al. Diagnostic performance of diffusion-weighted MRI in the detection of nonpalpable undescended testes: comparison with conventional MRI and surgical findings. *AJR Am J Roentgenol.* 2010 Oct;195(4):W268-73.
12. Kato T, Kojima Y, Kamisawa H, et al. Findings of fat-suppressed T2-weighted and diffusion-weighted magnetic resonance imaging in the diagnosis of non-palpable testes. *BJU Int.* 2011 Jan;107(2):290-4.
13. Kier R, McCarthy S, Rosenfield AT, et al. Nonpalpable testes in young boys: evaluation with MR imaging. *Radiology.* 1988 Nov;169(2):429-33.
14. Lam WW, Tam PK, Ai VH, et al. Gadolinium-infusion magnetic resonance angiogram: a new, noninvasive, and accurate method of preoperative localization of impalpable undescended testes. *J Pediatr Surg.* 1998 Jan;33(1):123-6.
15. Miyano T, Kobayashi H, Shimomura H, et al. Magnetic resonance imaging for localizing the nonpalpable undescended testis. *J Pediatr Surg.* 1991 May;26(5):607-9.
16. Siemer S, Humke U, Uder M, et al. Diagnosis of nonpalpable testes in childhood: comparison of magnetic resonance imaging and laparoscopy in a prospective study. *Eur J Pediatr Surg.* 2000 Apr;10(2):114-8.
17. Desireddi NV, Liu DB, Maizels M, et al. Magnetic resonance arteriography/venography is not accurate to structure management of the impalpable testis. *J Urol.* 2008 Oct;180(4 Suppl):1805-8; discussion 1808-9.
18. Green R, Jr. Computerized axial tomography vs spermatic venography in localization of cryptorchid testes. *Urology.* 1985 Nov;26(5):513-7.
19. Lam WW, Tam PK, Ai VH, et al. Using gadolinium-infusion MR venography to show the impalpable testis in pediatric patients. *AJR Am J Roentgenol.* 2001 May;176(5):1221-6.
20. Bertelloni S, Baroncelli GI, Ghirri P, et al. Hormonal treatment for unilateral inguinal testis: comparison of four different treatments. *Horm Res.* 2001;55(5):236-9.
21. Bica DT and Hadziselimovic F. Buserelin treatment of cryptorchidism: a randomized, double-blind, placebo-controlled study. *J Urol.* 1992 Aug;148(2 Pt 2):617-21.
22. Bica DT and Hadziselimovic F. The behavior of epididymis, processus vaginalis and testicular descent in cryptorchid boys treated with buserelin. *Eur J Pediatr.* 1993;152 Suppl 2:S38-42.
23. Christiansen P, Muller J, Buhl S, et al. Treatment of cryptorchidism with human chorionic gonadotropin or gonadotropin releasing hormone. A double-blind controlled study of 243 boys. *Horm Res.* 1988;30(4-5):187-92.

24. Christiansen P, Muller J, Buhl S, et al. Hormonal treatment of cryptorchidism--hCG or GnRH--a multicentre study. *Acta Paediatr.* 1992 Aug;81(8):605-8.
25. De Muinck Keizer-Schrama SM, Hazebroek FW, Drop SL, et al. LH-RH nasal spray treatment for cryptorchidism. A double-blind, placebo-controlled study. *Eur J Pediatr.* 1987;146 Suppl 2:S35-7.
26. De Muinck Keizer-Schrama SM, Hazebroek FW, Matroos AW, et al. Double-blind, placebo-controlled study of luteinising-hormone-releasing-hormone nasal spray in treatment of undescended testes. *Lancet.* 1986 Apr 19;1(8486):876-80.
27. Hazebroek FW, de Muinck Keizer-Schrama SM, van Maarschalkerweerd M, et al. Why luteinizing-hormone-releasing-hormone nasal spray will not replace orchiopexy in the treatment of boys with undescended testes. *J Pediatr Surg.* 1987 Dec;22(12):1177-82.
28. Forest MG, David M, David L, et al. Undescended testis: comparison of two protocols of treatment with human chorionic gonadotropin. Effect on testicular descent and hormonal response. *Horm Res.* 1988;30(4-5):198-205; discussion 205-6.
29. Hagberg S and Westphal O. Treatment of undescended testes with intranasal application of synthetic LH-RH. *Eur J Pediatr.* 1982 Dec;139(4):285-8.
30. Hesse V and Fischer G. Three injections of human chorionic gonadotropin are as effective as ten injections in the treatment of cryptorchidism. *Horm Res.* 1988;30(4-5):193-7.
31. Karpe B, Eneroth P and Ritzen EM. LHRH treatment in unilateral cryptorchidism: effect on testicular descent and hormonal response. *J Pediatr.* 1983 Dec;103(6):892-7.
32. Olsen LH, Genster HG, Mosegaard A, et al. Management of the non-descended testis: doubtful value of luteinizing-hormone-releasing-hormone (LHRH). A double-blind, placebo-controlled multicentre study. *Int J Androl.* 1992 Apr;15(2):135-43.
33. Rajfer J, Handelsman DJ, Swerdloff RS, et al. Hormonal therapy of cryptorchidism. A randomized, double-blind study comparing human chorionic gonadotropin and gonadotropin-releasing hormone. *N Engl J Med.* 1986 Feb 20;314(8):466-70.
34. Wit JM, Delemarre-Van de Waal HA, Bax NM, et al. Effect of LHRH treatment on testicular descent and hormonal response in cryptorchidism. *Clin Endocrinol (Oxf).* 1986 May;24(5):539-48.
35. Abolyosr A. Laparoscopic versus open orchiopexy in the management of abdominal testis: a descriptive study. *Int J Urol.* 2006 Nov;13(11):1421-4.
36. Arda IS and Ersoy E. The place of the technique of narrowing neck of the dartos pouch on the ascent of testis after surgery. *Scand J Urol Nephrol.* 2001 Dec;35(6):505-8.
37. Ferro F, Spagnoli A, Zaccara A, et al. Is preoperative laparoscopy useful for impalpable testis? *J Urol.* 1999 Sep;162(3 Pt 2):995-6; discussion 997.
38. Davenport M, Brain C, Vandenberg C, et al. The use of the hCG stimulation test in the endocrine evaluation of cryptorchidism. *Br J Urol.* 1995 Dec;76(6):790-4.
39. Merksz M, Toth J and Pirot L. Testosterone secretion in children with undescended testis. *Int Urol Nephrol.* 1992;24(4):429-37.
40. Ayca Z, Ustunsalih-Inan Y, Cetinkaya E, et al. Evaluation of low-dose hCG treatment for cryptorchidism. *Turk J Pediatr.* 2006 Jul-Sep;48(3):228-31.
41. Esposito C, De Lucia A, Palmieri A, et al. Comparison of five different hormonal treatment protocols for children with cryptorchidism. *Scand J Urol Nephrol.* 2003;37(3):246-9.
42. Hadziselimovic F. Successful treatment of unilateral cryptorchid boys risking infertility with LH-RH analogue. *Int Braz J Urol.* 2008 May-Jun;34(3):319-26; discussion 327-8.
43. Hadziselimovic F and Herzog B. Treatment with a luteinizing hormone-releasing hormone analogue after successful orchiopexy markedly improves the chance of fertility later in life. *J Urol.* 1997 Sep;158(3 Pt 2):1193-5.
44. Al-Mandil M, Khoury AE, El-Hout Y, et al. Potential complications with the prescrotal approach for the palpable undescended testis? A comparison of single prescrotal incision to the traditional inguinal approach. *J Urol.* 2008 Aug;180(2):686-9.
45. Anoussakis C, Liakakos D, Kiburis J, et al. Effect of surgical repair of cryptorchidism on endocrine testicular function. *J Pediatr.* 1983 Dec;103(6):919-21.
46. Baker LA, Docimo SG, Surer I, et al. A multi-institutional analysis of laparoscopic orchidopexy. *BJU Int.* 2001 Apr;87(6):484-9.
47. Chandrasekharam VV. Laparoscopy vs inguinal exploration for nonpalpable undescended testis. *Indian J Pediatr.* 2005 Dec;72(12):1021-3.

48. Chang B, Palmer LS and Franco I. Laparoscopic orchidopexy: a review of a large clinical series. *BJU Int.* 2001 Apr;87(6):490-3.
49. Chang M and Franco I. Laparoscopic Fowler-Stephens orchiopey: the Westchester Medical Center experience. *J Endourol.* 2008 Jun;22(6):1315-9.
50. Cloutier J, Moore K, Nadeau G, et al. Modified scrotal (Bianchi) mid raphe single incision orchiopey for low palpable undescended testis: early outcomes. *J Urol.* 2011 Mar;185(3):1088-92.
51. Comploj E, Mian M, Koen M, et al. Single-vs. Two-stage fowler-stephens orchidopexy: Are two operations better than one? A retrospective, single-institution critical analysis. *Current Urology.* 2011 April;5 (1):12-17.
52. Denes FT, Saito FJ, Silva FA, et al. Laparoscopic diagnosis and treatment of nonpalpable testis. *Int Braz J Urol.* 2008 May-Jun;34(3):329-34; discussion 335.
53. Dhanani NN, Cornelius D, Gunes A, et al. Successful outpatient management of the nonpalpable intra-abdominal testis with staged Fowler-Stephens orchiopey. *J Urol.* 2004 Dec;172(6 Pt 1):2399-401.
54. Escarcega-Fujigaki P, Rezk GHP, Huerta-Murrieta E, et al. Orchiopey-laparoscopy or traditional surgical technique in patients with an undescended palpable testicle. *Journal of Laparoendoscopic and Advanced Surgical Techniques.* 2011 01 Mar;21 (2):185-187.
55. Gheiler EL, Barthold JS and Gonzalez R. Benefits of laparoscopy and the Jones technique for the nonpalpable testis. *J Urol.* 1997 Nov;158(5):1948-51.
56. Gilhooly PE, Meyers F and Lattimer JK. Fertility prospects for children with cryptorchidism. *Am J Dis Child.* 1984 Oct;138(10):940-3.
57. Humphrey GM, Najmaldin AS and Thomas DF. Laparoscopy in the management of the impalpable undescended testis. *Br J Surg.* 1998 Jul;85(7):983-5.
58. Kim J, Min GE and Kim KS. Laparoscopic orchiopey for a nonpalpable testis. *Korean Journal of Urology.* 2010 February;51 (2):106-110.
59. Lintula H, Kokki H, Eskelinen M, et al. Laparoscopic versus open orchidopexy in children with intra-abdominal testes. *J Laparoendosc Adv Surg Tech A.* 2008 Jun;18(3):449-56.
60. Moursy EE, Gamal W and Hussein MM. Laparoscopic orchiopey for non-palpable testes: Outcome of two techniques. *Journal of Pediatric Urology.* 2011 April;7 (2):178-181.
61. Okuyama A, Nonomura N, Nakamura M, et al. Surgical management of undescended testis: retrospective study of potential fertility in 274 cases. *J Urol.* 1989 Sep;142(3):749-51.
62. Radmayr C, Oswald J, Schwentner C, et al. Long-term outcome of laparoscopically managed nonpalpable testes. *J Urol.* 2003 Dec;170(6 Pt 1):2409-11.
63. Stec AA, Tanaka ST, Adams MC, et al. Orchiopey for intra-abdominal testes: factors predicting success. *J Urol.* 2009 Oct;182(4 Suppl):1917-20.
64. Yavetz H, Harash B, Paz G, et al. Cryptorchidism: incidence and sperm quality in infertile men. *Andrologia.* 1992 Sep-Oct;24(5):293-7.

Appendix F. Applicability

Table F-1. Applicability for KQ1a

Table F-2. Applicability for KQ1b

Table F-3. Applicability for KQ2

Table F-4. Applicability for KQ3

Table F-1. Applicability for KQ1a

Domain	Description of applicability of evidence compared to question
Population	The study populations were pre-pubescent boys with non-palpable undescended testes. The enrollment selection criteria and participant characteristics were not always explicitly detailed. Participants were excluded if they refused imaging or surgery and inappropriate exclusions were avoided.
Intervention	Studies used ultrasound with varying frequency ranging between 3.5-12 MHz for imaging. CT scan and various magnetic resonance imaging techniques including conventional MRI, diffusion weighted MRI, MRA, MRV either alone or in combination were also employed. Imaging results were most always interpreted without the knowledge of the surgical results
Comparators	The comparators include open or laparoscopic surgical results
Outcomes	The outcomes were pre-operative identification and location of presence or absence of non-palpable undescended testes by imaging along with their concordance with surgical results. The assessments of outcomes were by radiologists or specialists and surgeons.
Setting	Only four of 18 studies were conducted in the U.S while half of the studies were conducted in Asia. Use of different types of scanners with different levels of operator experience along with lack of information on participants' physical examination make comparisons of standard care difficult.

Table F-2. Applicability for KQ1b

Domain	Description of applicability of evidence compared to question
Population	The study population primarily consisted of children with bilateral non-palpable cryptorchidism. One of the studies also included children with unilateral non-palpable cryptorchidism but the results were reported separately which allowed easy identification of the applicable results.
Intervention	Both studies used three daily injections of hCG to stimulate testosterone production although varying doses were used. Serum testosterone levels were measured by standard radioimmunoassays which are commonly available
Comparators	Not applicable.
Outcomes	All studies confirmed the presence or absence by surgical exploration, which would be considered the gold standard for diagnosing anorchia in cryptorchidism.
Setting	Both studies were performed in Europe. However, there are minimal differences in the standard of care in this setting between Europe and the U.S. It is assumed that the initial hCG stimulation test was performed in the outpatient setting although this is not specifically mentioned.

Table F-3. Applicability for KQ2

Domain	Description of applicability of evidence compared to question
Population	The study populations include children with both bilateral and unilateral cryptorchidism of varying ages. The study populations included the entire gamut of possible locations of the cryptorchid testicle, ranging from very low-lying testis in the high scrotum to nonpalpable abdominal testes and all locations in between. Most but not all of the studies made an effort to explicitly exclude children with retractile testes.
Intervention	Varying hormonal agents were used alone and in combination, including hCG, LHRH (and its analogues) and hMG. Differing doses were used across the study in addition to differing dosing schedules. Most of the agents studied are available in the United States and represent the most commonly used hormones in this setting although some of the doses studied may not reflect standard practice in the U.S.
Comparators	The comparators include placebo (in matched dosing schedules) and various hormonal agents alone and in combination. These comparators are commonly used in practice, although some of the doses studied may not be consistent with standard of care in the U.S.
Outcomes	The most common outcome assessed was successful testicular descent into the scrotum. This was commonly assessed by the study or clinic staff as opposed to seeking the opinion of the affected child's parent, whose opinion might differ with the clinician. Most but not all of the studies had adequate follow-up to assess for late recurrence/re-ascent of the testicle. Side-effects of hormonal therapy were infrequently described. Semen analysis in adulthood was assessed in some studies as a proxy for fertility which is fairly widely accepted.
Setting	The majority of studies were performed in Europe where use of hormonal therapy in the treatment of cryptorchidism is presumably more common. The results of these studies, however, are still applicable to the U.S.

Table F-3. Applicability for KQ3

Domain	Description of applicability of evidence compared to question
Population	The study populations include children of varying ages with both unilateral and bilateral cryptorchidism. Like KQ2, The study populations included the entire gamut of possible locations of the cryptorchid testicle, ranging from very low-lying testis in the high scrotum to nonpalpable abdominal testes and all locations in between.
Intervention	The surgical interventions studied included open and laparoscopic approaches to the diagnosis and treatment of cryptorchidism. The surgical techniques studied include open and laparoscopic abdominal exploration for the localization of the cryptorchid testicle; laparoscopic and open primary orchiopexy, one-stage and two-stage Fowler-Stevens orchiopexy and; various minor modifications of open orchiopexy. While a number of the minor modifications studied are not commonly employed in the US today, the most common surgical techniques (primary orchiopexy and one- and two-stage Fowler-Stevens orchiopexy) are included using both open and laparoscopic approaches.
Comparators	Comparators included the same approaches mentioned in the intervention section above.
Outcomes	The most common outcomes assessed were appropriate testicular position into the scrotum and testicular atrophy. These were commonly assessed by the study or clinic staff as opposed to seeking the opinion of the affected child's parent, whose opinion might differ with the clinician. Most but not all of the studies had adequate follow-up to assess for late recurrence of atrophy. Long-term fertility outcomes were also assessed in some studies using either semen analysis or actual paternity rates.
Setting	Seven of the studies were performed in the US while six were performed in Europe and eight in other countries. While the standard of care is similar between the US and Europe, it is difficult to determine if the studies from the other countries truly reflect the US standard of care.